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PAPER TRADE JOURNAL

PAPER
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BLEACHED and UNBLEACHED
SULPHITES
KRAFT PULPS
GROUND WOOD
NORRONA
PULP STONES

PERKINS-GOODWIN CO.
33 WEST 42nd STREET
NEW YORK

PAPER
PRINTING PAPER
of
EVERY DESCRIPTION

Entered as Second-Class Matter June 28, 1879, at the New York Post Office, Under Act of Congress, March 3, 1879. — FIFTY-THIRD YEAR — ESTABLISHED 1872 — Published Every Thursday by the Lockwood Trade Journal Co., 10 E. 39th Street, New York, N. Y.

A lubricant for Beater bearings

—*that gives the "film of protection" and reduces operating temperatures*

THERE are many parts of paper mill machinery that are difficult to lubricate correctly—and the beater bearing is one of them. This is because such tremendous pressures are placed on these bearings. Extremely high operating temperatures result.

But according to the enthusiastic testimonials of many of our satisfied customers, we have considerably less trouble lubricating beater bearings correctly than our competitors have. And we have evidence in our files showing that beater bearing temperatures have been reduced from 250°F. to 120°F. through the use of Tycol Medium Fibre Grease—the lubricant recommended by our Engineering Bureau for beater bearings, both open and enclosed.

One of our Staff Engineers will be glad to call and present this evidence to you, and tell you more about the Tide Water Power Group.

If your beater bearings are of the open type, he has a practical suggestion for lubricating them that will make his visit doubly worth your while.

The F[illegible]TION

—for paper mill machinery

In their application to each phase of paper mill lubrication, the lubricants comprising the Tide Water Power Group form the "film of protection," *thin as tissue, smooth as silk, tough as steel.* The application of the Tide Water Power Group to your machinery will give you economical lubrication—maximum power, uninterrupted operation and increased production.

The Tide Water Power Group

TYCOL GEAR COMPOUND
TYCOL LUBRICANT No. 1
TYCOL YARN GREASE
TYCOL H. T. GREASE
TYCOL MEDIUM FIBRE GREASE
TYCOL GEAR COATING SOFT
GRENOL STEAM CYLINDER OILS
DYNOL ENGINE AND TURBINE OILS
TYCOL LUBRICATING GREASES
CLAROL MACHINERY OILS

TIDE WATER LUBRICANTS

TIDE WATER OIL SALES CORPORATION

ELEVEN BROADWAY NEW YORK

THE MATTER OF BALANCE

¶ In any high speed roll-winder, the winding drums revolve at a surface speed which is often as much as 2000 feet per minute. If the drums are not properly balanced, the bearings will quickly wear out and the effective life of the machine will be shortened through the vibration which ordinary drums will cause. This is an important fact which is sometimes ignored by both builders and buyers of roll-winding equipment.

¶ The winding drums of CAMACHINE high speed mill type winders are all properly balanced. They are balanced dynamically — balanced while revolving in a specially designed balancing machine — balanced so that the center of gravity coincides with the center of rotation.

¶ In actual day-after-day practical service in the mill, dynamic balance proves its worth in the reduction of maintenance charges and in the elimination of shutdowns for repairs.

Shall we tell you how CAMACHINES can serve you in the mill? We will be able to send you a definite proposal if you will write us concerning your problems in detail.

Cameron Machine Company
Sixty-one Poplar Street
Brooklyn, New York, U.S.A.
(Builders of CAMACHINES)

PAPER TRADE JOURNAL
ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-THIRD YEAR

Published Every Thursday by the
LOCKWOOD TRADE JOURNAL CO., INC.

LESLIE R. PALME' PRESIDENT | GEO. S. MACDONALD VICE-PRESIDENT & TREAS | F. K. HOPPIE SECRETARY

10 EAST 39TH ST. N.Y. U. S. A

TABLE OF CONTENTS

Copyrighted, 1925, by Lockwood Trade Journal Co., Inc.

To Fight Clay Duty Increase 29
Printers Entertained at Kalamazoo 29
Blank Book Men Want to Organize 29
Philadelphia Trade Grows Cautious 30
Exhibition of Direct Mail Papers 30
Fine Paper Men Discuss Import Work 30
Montreal Interested in Syndicate Talk 31
To Lay Out Forest Areas 31
St. Maurice Paper Earnings 31
Proposed News Print Merger 31
Federal Sales Tax Condemned 32
Pulpwood Harvest a Heavy One 32
Work Starts on New Pulp Plant 32
Ontario Forest Patrol Augmented 32
Norwegian Paper Industry in 1924 34
Business Brighter in Boston 34
Paper Bags Used More by Cement Men 36
OBITUARY 36
Construction News 38
New York Trade Jottings 40
May Postpone News Conference 40
C. L. La Boiteaux Elected Chairman 40
Bradford Paper Co. to Start 40
Standard Co. to Build Stock House 40
U. S. Paper Imports and Exports 42
EDITORIAL SECTION 46
To Protect Riverside Trees 47
Paper Making at Cumberland Mills 47
TECHNICAL SECTION 49
COST SECTION 59
Imports of Paper and Paper Stock 64
Government Paper Bids and Awards 68
To Sell Myers Paper Mill 68
More Warehouse Room for D. Graff 70
City of Holyoke Takes Legal Steps 70
David F. Lawlor Acting Manager 72
John R. Booth Alert at 98 72
NEW YORK MARKET REVIEW 70
MISCELLANEOUS MARKETS 72
MARKET QUOTATIONS 74

Want and For Sale Advertisements, Pages 78, 79, 80, 81

MONROE
Louisiana

Where Cheap Natural Gas Lowers Overhead

Monroe offers manufacturers that most important of all economies in factory operation—cheap fuel. Monroe is right on the edge of the world's greatest known gas field—more than 250 wells with a rock pressure of 1,050 lbs. Industries in Monroe pay for gas at the rate of 5c. to 8c. per thousand cu. ft.—which means that $1.50 will buy in gas the same heating value that it takes $6 to buy with oil and $10 with coal. Monroe's gas is of highest quality—non-poisonous and dry with a heating value of approximately 1,000 B.T.U.

Waste from nearby sawmills and thousands of acres of second-growth pine near Monroe are waiting to be converted into pulp and paper. Oat straw in the immediate vicinity and rice straw from southern Louisiana are available for making straw board. And many recent inquiries for straw board show that there is an increasing demand for it in and around the city.

Why Not Look Into The Situation Here?

It will pay you to look into the situation at Monroe and to consider it as a location for your main or branch factory unit. Big plants are being built in this section. Monroe is being talked of as the coming industrial center.

Full information, specifically prepared, is available for anyone who is interested in the industrial, commercial or agricultural prospects open in Monroe. Inquiries will be promptly answered, but best of all, we urge that you **visit** Monroe—one of the most desirable communities in which to live that can be found in this land of sunshine.

Advantages Manufacturers Enjoy at Monroe

Cheap Natural Gas and plenty of it.

Lower Taxes — The rate is lower; and assessed values are less than in industrial centers of the North and East.

Cheap Freight Rates—especially on lumber and wood products.

Good Transportation— 3 railroads, 2 of them trunk lines; hard-surfaced highways; year-round packet service, with low rates, on the Ouachita River to New Orleans.

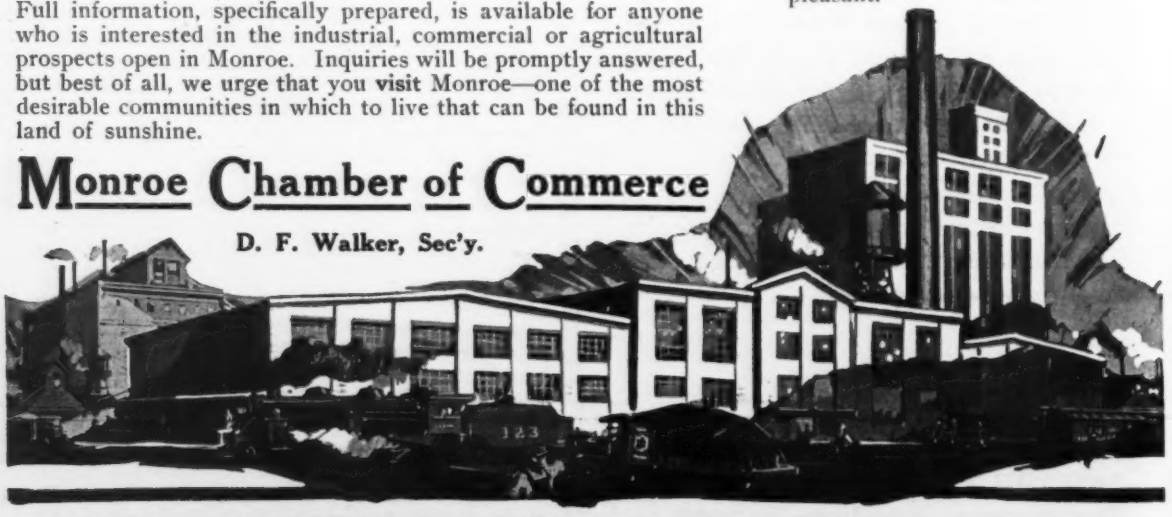
Building Materials — lumber, brick, clay, tile, sand, etc.

Labor that is contented.

A ***Climate*** that permits out-of-door operations all the year and makes living cheaper and more pleasant.

Monroe Chamber of Commerce

D. F. Walker, Sec'y.



It Costs Less To Manufacture in Monroe

ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

PAPER

Vol. LXXX. No. 16 Thursday, April 16, 1925

The Magazine of the Paper Industry

Prepare to Fight Increase of Duty on English Clay

Committee of Paper Manufacturers and Clay Importers Meet at Waldorf-Astoria to Discuss Complaint Filed With U. S. Tariff Commission and Retain Henry A. Wise as Attorney to Resist All Efforts Made to Increase Duty Fifty Per Cent—Tariff Commission Has Matter Pending But No Dates Have Been Set for Hearings as Yet

Steps have been taken to fight the efforts being made to obtain an increase of 50 per cent duty on English clay. That step was taken at a meeting recently held by a committee of paper manufacturers and the Clay Import Committee at a meeting recently held at the Waldorf-Astoria.

The meeting was called for the sole purpose of discussing the demand of the domestic clay producers for the increase in duty and for consideration of the complaint concerning the same which has been filed with the United States Tariff Commission.

Retain Legal Light

As a result of the meeting Henry A. Wise has been retained as attorney with instructions to resist by such legal means as may be necessary any and all efforts which may be made to induce the U. S. Tariff Commission to put such an increase of duty into effect. The matter is now pending but dates have not yet been set for any hearings. Mr. Wise immediately began the work of preparing data and statistics which will be laid before the Commission in due time.

Mr. Wise is well known to the paper trade through his connection with many notable cases involving the interests of the paper industry. He is attorney for the coated paper mills in the casein matter and is also in charge of the legal work of the Import Committee of the Paper Industry.

Manufacturers Interested

A PAPER TRADE JOURNAL representative interviewed one of the gentlemen who was in attendance at the meeting held at the Waldorf-Astoria who explained the situation as follows:—

"The paper manufacturers have been drawn out by questionnaire on the subject of this proposed increase in duty on English clay and it has been found that they are not only opposed to it as a body but that they feel so keenly on the subject that they view this matter as their personal fight rather than the fight of the clay importers. They declare that there is absolutely no excuse for such an increase especially in view of the fact that most of the English clay which is brought here cannot be looked upon as competitive to domestic clay as many of the paper manufacturers do not use the domestic clay as they cannot get the same color and quality the English clay gives them. Some of them go so far as to say that they would not use it and could not use it even if it was obtainable at the same price. That is especially true of the coated paper mills where the English clay seems to give just the color and quality that is sought."

Questionnaires Convincing

The gentleman quoted above also said that he believed that when the questionnaires filled out by the paper manufacturers were laid before the U. S. Tariff Commission that the matter would end right there. "It seems to me," he said, "that the manufacturers have been so outspoken in their answers to these questionnaires that when the Tariff Commission considers their evidence in the case that the petition for an increase in duty will be reported on negatively without even a hearing on the matter being held."

K. V. P. Co. Entertains Printers

KALAMAZOO, Mich., April 14, 1925.—The Kalamazoo Vegetable Parchment Company was host Tuesday evening, April 7, to the Ben Franklin Club of Kalamazoo and numerous other employing printers from southwestern Michigan cities. Dinner was served at the community house, followed by a musical program in which the Parchment orchestra and Parchment quartet participated. George B. Putt, president of the Ben Franklin Club, welcomed the visitors to Kalamazoo.

Jacob Kindleberger, president of the Kalamazoo Vegetable Parchment Company, gave a talk on "How to Take the Hell Out of Printing." Pointing out the numerous problems that confront this craft, he declared that employers to succeed must eliminate price cutting and instead turn out the best grade of work possible. This can only be done by instilling the spirit of co-operation and understanding between employers and employees on the one hand and building up a spirit of confidence in competing printing houses on the other. He deplored the existence of cut throat methods that have for so many years dominated the trade.

Ask to Be Organized

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 14, 1925.—Dissatisfied because of a revised schedule in wages, a number of pieceworkers in the National Blank Book Company have asked the organization committee of the Central Labor Union to organize them at a mass meeting to be held this week. Only a small part of the operating force is affected. These consist of pieceworkers.

Frank B. Towne, Treasurer of the Company, said today that the new schedule which affects only a few of the employees had not been completed, but that the percentage of decrease was not as great as asserted. The following statement was given out:

Adjustment of piece rates made by the National Blank Book Company are only made where they are exceptionally high and out of line with other prices paid by this company for similar work. The great majority of our employees are not affected.

This company is doing everything possible to avoid a general reduction in wages. Competition is very keen and a general reduction can only be avoided by every possible economy which we can effect.

Philadelphia Paper Trade Becoming More Cautious

Distributors as Well as Buyers Appear to be Adopting Policy of "Watch Your Step"—Business in Fine Paper Line Becomes of Drifting Character—Fine Paper Dealers Talk Over Import Activities—D. L. Ward Company Exhibits Direct Mail Papers.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., April 13, 1925.—Caution is the keynote of the paper industry in the Quaker City in these days of duller trend in the trade. This attitude of caution is not confined to the buyers alone but is also the spirit in which the distributors are making their commitments to the mills. There is very little trading on either side of the market. The consumer is too cautious about the future of business to place any sizable orders among the local jobbers and the distribtors are taking the same attitude towards the mills. There is one hopeful sign in the trade that shows business is much healthier than it was at this time last year. It is that most of the dealers now are able to take advantage of the lower prices being made for many grades of papers and that they have been able to wipe out much of their indebtedness incurred during the extreme period of 1924.

Fine Paper Distribution Drifting

There is a tendency on the part of the fine paper consumers to hold off their orders for stock requirements and whatever business is being done is more of the drifting character to meet only the immediate needs in the smallest proportions attainable. Most of the mill shipments are for various grades of book papers that are freely distributed among the larger technical and educational publication firms of the city. The smaller printers and publishers, of course, are buying only for immediate needs and they are infrequent purchasers of any of the lines of writings, bonds, ledgers or other grades of writings, the local markets being flooded with many offerings at low values.

Coarse Papers in Glutted Market

The coarse paper market is glutted with many grades of wrappings and specialties that just now are hard to move. A few of the Krafts and wrappings have been in demand during the Easter season but now that this festive occasion is past there is a return to the quieter days of early March when the present dull period set in. Tissues are in small demand now that the Easter is over and there is a gradual lessening in the orders for florist's papers. The prolonged cold weather has had a benefiical effect on the specialties used by the building trade.

Paper Trade Association Meets

An informal discussion of the imports activities which were among the important subjects introduced at the recent Convention of the National Paper Trade Association held in New York took place at the gathering of the Fine Paper Dealers Division of the Philadelphia Paper Trade Association. Although the question of Imports was not one that had been given publicity it was the subject of considerable moment when it was brought up for action before the New York gathering. Its direct connection with the Philadelphia Association is in the appointment of one of the leaders in the import local trade to the Chairmanship of the newly created Imports Committee. The Chairman of this Committee is President Norbert A. Considine, of the Paper House of Pennsylvania and prominent among the members of the Quaker City Association as Chairman of the Trades Relation Committee and perhaps the largest of the importers in this section of the country, whose foreign affiliations connect him with the leading news print mills in Scandinavia and with the paper manufacturers of Germany, through the acquisition of an import and export headquarters recently in the Teutonic Republic. It was the first time within two months that Chairman Considine was present at the meeting of the local paper dealers, having been sojourning in Europe in the meantime. Another member who was present after a long absence was Richard A. Hartung of A. Hartung, Inc. The Chairman of the Thursday gathering held in the Bourse was W. W. Seary, of the D. L. Ward Company.

Join New Gift and Art Association

There are to be included among the members of the newly organized Gift and Art Association which was developed as an outcome of the recent exhibit in this city, the various importers of fine papers who were among the firms at the Gift and Art Show. The firms that joined the National Gift and Art Association were the Julius Beckhard Company, Inc., 3 West 29th street, New York, and the Arthur Goodman Company, Inc., 215 Fourth Ave., New York. The former concern, through its New York Manager, A. C. Moss, is engaged in the importation of German hand made papers adapted for the stationery, engraving and printing trades and also includes a line of glassines and tissues for these same industries. The Goodman Company represents the famous Newton Mill Brands of Hyde, England, manufacturers of plain and fancy stationery and engraving and printing papers.

Exhibits Direct Mail Papers

A comprehensive display of direct by mail ads and the various papers used for this purpose has been placed on exhibition in the D. L. Ward Company, headquarters, 28 S. 6th street. The exhibit is said to be among the most eleborate ever made and includes all the papers of well known mills throughout the country. Included in the displays are advertising matter of more than 97 per cent of the largest advertising concerns in the nation. It was compiled by Advertising Manager William A. Hentz, of the Ward Company and is under the direction of R. D. Fleming. This exhibit has been made part of the Graphic Art Department of the Ward Company and is being held on the second floor of the building. It is the first time that so comprehensive an assortment of Direct Mail Advertising matter has been displayed. There are more than 3,000 ads collected from over 100 concerns.

Makes Tissues for Converters

A new line of manufacture will be undertaken by Harvey Garrett of the Edwin T. Garrett Company, Landsowne, Pa., manufacturers of fine tissues, wrappings, and copying and manifold papers. This new enterprise will be the production of toilets for the converting trade and will include large rolls for the conversion of toilets into smaller roll products. These papers will be produced in rolls of ten pound basis and an average of ten tons a day is to be made available for the trade.

Produces Exclusive Papers

A special line of papers adapted for the manufacture of explosives is to be produced by the Analomink Paper Company of North Water Gap, Pa. The newest of specialties which this company has added within recent months is now being used for the manufacture of dynamite and gun powder cartridges for fire arms. Other similar papers used in this type of explosives as well as cartridges for other weapons are being made. The Analomink Company has been especially active in the production of a large assortment of specialties that have been gradually added to the lines. Among other recent additions was that of the narrow rolls in Manila and sulphite papers. Eastern Sales Manager Spear who made the rounds of the Philadelphia trade during the past week introduced for the first time the new explosive lines.

Montreal Interested in Negotiations of Syndicate

Angus McLean Prominent in Efforts to Secure Acquisition of St. Lawrence Pulp and Lumber Corporation —Department of Lands and Forests Laying Out Areas—Good Financial Report Made by St. Maurice Paper Co., Ltd.—Comment on Proposed News Print Merger

MONTREAL, Que., April 14, 1925.—Angus McLean, President and General Manager of the Bathurst Company, Limited, is at the head of the syndicate said to be negotiating for the acquisition of the St. Lawrence Pulp and Lumber Corporation, and the possibilities are that this corporation will be taken over either by the Bathurst Company or by a separate company to be formed. The St. Lawrence Pulp and Lumber Corporation has a sulphite pulp mill at Chandler with a capacity of 250,000 pounds of easy bleaching and strong sulphite fibre per day. The mill has been controlled by the Saguenay Pulp and Power Corporation but has been operated by the Bay Sulphite Company under a lease. The Saguenay Corporation has been in difficulties for a number of years and is now in process of reorganization. The St. Lawrence Pulp and Lumber Corporation has a bond issue outstanding of which the largest part is owned by the successor of the Bay Sulphite Company—the Port Alfred Pulp and Paper Corporation, controlled chiefly, it is understood, by R. O. Sweezey, pulp and paper engineer of Montreal, and J. Harry Gundy, financial man of Toronto. The Chandler mill is leased to the Port Alfred company. It is understood that the property and the lease will be turned over to the new McLean group in exchange for securities, preferred stock and perhaps some bonds—and that these securities will likely be distributed to the present bondholders of the St. Lawrence Company.

Grand Falls Hearing in Montreal

The International Joint Waterways Commission has fixed May 15 at Montreal as the time and place for the general hearing of the New Brunswick application to develop power at Grand Falls on the St. John River. It is said by commission members that the whole question will be fully threshed out then.

Quebec Forest Areas Will Be Laid Out Soon

Active steps are being commenced by the Quebec Department of Lands and Forests, under direction of Hon. Honore Mercier, towards preparing to put into effect the legislation enacted at the recent session of the Quebec Legislature in the matter of creation of forest reserves. The engineers of the Government will shortly be out surveying the forest areas in the drainage basins of the province, and following this survey steps will be taken to clean up the forests in the matter of burned over sections, fallen trees and brushwood. It will then be a matter of arranging for this wood to be cut away, which will probably be by means of tender so as to secure the best possible prices for the department, and the Minister will then be in a position to meet the demands of the neighborhood mills in need of wood on the basis provided for by the law. The purpose of Hon. Mr. Mercier's legislation in creating these forest reserves is to place aside from the ordinary Crown timber lands the forest areas at the river drainage basis so that mills actually located there will not run short of wood. Ordinarily, such areas would be put up for auction and the cutting rights go to the highest bidder which would mean in some cases that the wood cut would be taken away from the district, and that ultimately the mills now located would run short of raw material. The department is completing the organization for protection of the forests against fire, and within 15 days the Government rangers, and the rangers working for the protective association of the companies, will be out of their "beats." For the first time in the history of forestry protection, both the Government men and those of the companies will wear uniforms, similar in each case except for special marks to distinguish the employer in each case. People going into the forests will, therefore, know immediately with whom they are dealing when given instructions as to forest protection. This may be said to be the second year in which the Government has directly taken over the task of forest protection. Last year the results were excellent, there being practically no fire of any extent in the areas under the control of the Government.

St. Maurice Paper Earnings

In its annual financial report for the twelve months ended December 31, 1924, St. Maurice Paper Company, Limited, of Cap Madelaine, Quebec, shows profits after all charges including interest and discount on the new note issue, equal to 7.7 per cent on the capital stock. This compares with a showing of 12.7 per cent in 1923, when, however, there was no note interest to pay. The balance sheet reflects the use of the funds brought in by the note issue, and there is an increase of more than 1¼ millions in working capital, the company's position in this respect being the best shown since 1920. Operating profit for the year amounted to $1,046,198 as compared with $1,253,431 in 1923. From this were taken the following deductions: Depreciation, $209,760; interest on notes $91,173; discount on notes, $2,154; leaving net profit at $748,108. Dividends at the rate of 6 per cent on the $9,539,300 of capital stock required the sum of $572,358, leaving $170,750 to be carried forward, making the amount at credit of profit and loss $1,029,592.

Proposed News Print Merger

The proposed merger of the leading news print mills in Ontario continues to be a leading topic of discussion in news print circles here. McCuaig Bros. & Co., members of the Montreal Stock Exchange, comment in their market bulletin as follows:—"If it materializes, and the chances appear favorable, the amalgamation of Ontario paper companies will constitute the most important development in the history of this Canadian industry. In addition to Spanish River and Abitibi, the names of all producers of news print of Ontario, with the exception of the Booth and Ontario Paper are mentioned. The combined daily output of these companies is in excess of 1,600 tons, or considerably more than that of the International Paper Company, the leading news print producer of the world. From a security standpoint, the consummation of a deal of this magnitude would result not only in attracting attention sharply to the Spanish River and Abitibi companies and result in a considerable appreciation in value of their shares, but it would also almost certainly exercise an indirect influence on the stocks of the news print companies operating in the St. Maurice Valley-Laurentide, St. Maurice, Belgo Canadian and St. Lawrence. Such a strong grouping of western news print producers would be the best argument for an amalgamation of the eastern ones, as it would greatly strengthen their position. Incidentally, nothing would stimulate the whole local market as much as a rise in the paper stocks."

Wayagamack Awards New Mill Contracts

Construction work on the news print mill of Wayagamack Pulp and Paper Company, Limited, has already started at Three Rivers. Contracts for construction and installation have been awarded to Charles Walmsley & Co., Ltd., of London, England, for the groundwood mill machinery and news print machines, and the Dominion Bridge Company of Montreal, for the steel work. The

(*Continued on page 72*)

Federal Sales Tax Condemned at Toronto Meeting

United Typothetae of America Declares Tax Is Injurious to Business—Returns Show Pulpwood Harvest Was Heavy One—Little Rapids Pulp Co. to Erect New Groundwood Pulp Plant—F. N. Burt Co. to Distribute New Shares on May 1—Ft. William Co. Starts Second News Print Machine

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, April 13, 1925.—The federal sales tax of Canada came in for severe condemnation at the semi-annual meeting of the sixteenth district of the United Typothetæ of America, which was held in Toronto last week and was attended by many printers and paper representatives. It was stated that the tax was injurious to business, that it was difficult to collect and could be easily avoided by the unscrupulous business man. The Typothetæ will work with other bodies in endeavoring to have the tax changed or eliminated, as it was declared that, so far as printing is concerned, since the same money was turned over three or four times a year, the levy reached a figure of fifteen to twenty per cent instead of five per cent.

There was also voiced strong opposition to the allowance of varying discounts by several members and a committee was appointed by the convention which will seek to secure a uniform discount rate to be quoted by all printers. C. W. Dearden, of the Strathmore Paper Company, Mittineague, Mass., and Watson M. Gordon, of the S. D. Warren Company, Boston, Mass., delivered instructive addresses along the line of greater cooperation in aiding the printer in making sales.

George K. Hebb, President of the United Typothetæ of America, was the guest of honor and spoke at the annual banquet. Greater standardization, with a consequent diminution of the smaller print shops was to feature the future as Mr. Hebb saw it, while, in order to benefit by the approach of better conditions, he urged closer cooperation between all printers and a standardization of all materials employed.

Pulpwood Harvest Was Heavy One

Pulpwood contractors, who have been busy during the past winter, have recently been pouring into the office of the Crown Timber Agent at Port Arthur, Ont., making returns for the season's cut preliminary to the annual statement of activities. It is said that the cut of pulpwood will show a total as large as last year, if not greater, for more operators were engaged. All the pulpwood contracted for by the Hammermill Paper Company, through its agent, M. Cochran, Port Arthur, has been unloaded on the ice opposite the Canadian Pacific depot. There is pile after pile stretching from the C. P. R. wharf to the Pigeon River mill, and when the ice goes out, this wood will completely block the inner harbor in that section until steamers have carried it away. Men have been engaged for the past few days in stretching booming logs to keep it within bounds.

Starting Work on New Pulp Plant

The company which will erect the new groundwood pulp plant on the Kagawong River, Manitoulin Island, is the Little Rapids Pulp Company, of Little Rapids, Wis., and not the Fox River Paper Company, of Appleton, Wis., as was originally stated in press dispatches. The contract for the buildings, which includes an 1800-foot waterpower canal, wood and steel flumes and docks, has been awarded to McLarty Bros., of Sault Ste. Marie, Ont., who will begin work in a few days. The Little Rapids Pulp Company will furnish and install their own machinery. The plant will have a daily capacity of about 20 tons of ground wood pulp.

Adding to Ontario Forest Patrol

Hon. James Lyons, Minister of Lands and Forests for Ontario, announced recently that the Provincial government, through recent purchases, had added four additional flying machines to the forest patrol fleet of Ontario. The fleet now numbers 19 and the machines were secured at the unusually low cost of $4,000 each. Mr. Lyons said that to all intents and purposes the machines were practically new. The Government considers that they were obtained at a very reasonable rate as new machines cost between $21,000 and $25,000. One unusual feature of the search for machines was the information obtained in the United States that the Russian Government had cleaned out the entire market. Mr. Lyons said that it had been reported to him that agents for the Russians had purchased trainloads of machines, new and old, motors and spare parts, for shipment to that country.

New Shares of F. N. Burt Co.

The new shares of the F. N. Burt Company, Toronto, are expected to be ready for distribution by May 1. They will be issued to shareholders at that time upon receipt of the old stock properly endorsed. A letter has been issued to the shareholders by E. G. Baker, secretary of the company, stating that the necessary steps have been taken to secure the supplementary letters patent. The subdivision of the old shares of $100 par into new stock of $25 par value was authorized by a meeting of shareholders held on March 24. It is understood that a considerable amount of preferred stock has been converted since the beginning of the year. About $342,500 par value of preferred shares was outstanding on December 31. About half that amount of stock has since been converted, and, judging by the rate at which requests for conversion are being made, the amount of preferred still outstanding will be still further reduced by the time the new certificates are ready for distribution.

Second News Machine Resumes Operations

The second news print machine of the Fort William Paper Company, Fort William, Ont., has resumed operations after being shut down for some time owing to lack of power. The output is now about 160 tons a day. In a short while the organization will begin its wood-preparing operations and several more men will be added to the working staff. Officials of the company state that the increased scale of operations at the plant is ascribed to the greater volume of water now available as a result of the spring freshets. It is hoped that the power supply will be steady throughout the year so that the two machines can be kept in constant use. The market demand is good and all that is needed is a permanent ample power supply. The officials of the company are not ready yet to discuss the possibility of the proposed extension to the plant and the installation of more machines.

Notes and Jottings of the Trade

Buntin, Reid Company, wholesale paper dealers, Toronto, have introduced to the trade a new Made-in-Canada product under the title of Balmoral cover. This paper has a walrus finish and is sold on competition with fancy finish and leather finish covers, which have previously been imported.

T. J. Macabe, President of Buntin, Reid Company, Toronto, and Mrs. Macabe, who have been spending the past few weeks in California, have returned home.

The Canadian Paper Board Company, which operate board mills at Frankford and Compbellford, Ont., and Montreal, have redeemed the second installment of their outstanding $800,000, seven per cent bonds amounting to $30,000 in accordance with the trust deed. A similar installment is required to be taken up on April 1 each year.

The number of accidents in the plant of the Abitibi Power and Paper Company, Iroquois Falls, Ont., during March was thirteen which shows an increase of five over February but a decrease over those of the corresponding month a year ago.

MATHIESON System

Mathieson Aqua Ammonia as a Casein Solvent

MANY manufacturers of high-grade coated papers have learned the advantages of Aqua Ammonia as a solvent for casein.

Aqua Ammonia is a superior solvent for this purpose due to the fact that it is readily volatilized by heat. When the paper impregnated with a solution of casein in ammonia, passes over the drying rolls, the ammonia is driven off. Only the casein—no solvent—remains in the paper.

Mathieson Aqua Ammonia, 26°, is a product of exceptional quality made by our synthetic process from highly purified nitrogen and hydrogen gasses. It is shipped in standard 110 gal. drums from our Niagara Falls plant or from warehouse stocks in principal cities.

We solicit inquiries from all Paper Mills using casein.

The MATHIESON ALKALI WORKS Inc.
250 PARK AVE. NEW YORK CITY
PHILADELPHIA CHICAGO PROVIDENCE CHARLOTTE

Caustic Soda ~ Liquid Chlorine
Bicarbonate of Soda
Anhydrous Ammonia

EAGLE THISTLE PRODUCTS

Soda Ash ~ Bleaching Powder
Modified Virginia Soda
Aqua Ammonia

Deal Direct with the Manufacturer

Norwegian Pulp and Paper Industry in 1924

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 13, 1925.—The Norwegian Pulp and Paper Industry during the 1924 labored under very disturbed conditions owing primarily to prolonged labor conflicts which affected not only the industry itself, but allied trades and industries, says Acting Commercial Attache Sorenson at Copenhagen in a very comprehensive report on the 1924 situation to the Paper Division of the Department of Commerce. He continues:

Production Restricted First Six Months

Production and export, as a consequence of these disturbances, was practically at a standstill during the first six months of the year. Following the settlement of the labor disputes, activity in these industries, however, rose so rapidly that the year's results, from a production and export point of view, while below that of the preceding year, were more satisfactory than generally anticipated. The general improvement in the financial status of the industry, as illustrated by the upward trend in the stocks of the most important companies, is no less a source of satisfaction. Prices, as quoted in Norwegian crowns, also showed considerable improvement over the previous year's, a condition due however to the drop in the value of the crown in relation to the pound sterling and dollar rather than to any development within the industry itself.

Below Average Capacity

The production of both chemical and mechanical pulp, it will be observed, was somewhat below the average capacity of the Norwegian mills, which is estimated at approximately 325,000 tons for the former and 725,000 tons for the latter. Stocks of chemical pulp on hand at the end of 1924 were roughly estimated at 22,000 tons of bleached sulphite, 15,500 tons of unbleached sulphite, and 5,000 tons of unbleached sulphate, a total of 42,500 tons. No approximate figures as to the stocks of mechanical groundwood on hand at the close of the year are available, but as advance sales are reported to have been rather heavy it can be taken for granted that these stocks are relatively small. During the past year the productive capacity of the industry has been increased through the establishment of several mills, and further extensions are planned. One mill producing mechanical groundwood has increased its capacity from 14,000 to 40,000 tons, while two new mills are under construction and upward of ten new ones are being planned.

Decrease in 1924 Exports

Notwithstanding the activity in the pulp and paper trade following the settlement of the labor disturbances, exports of pulp and paper on the whole did not reach the volume of the 1923 trade. Exports of pulp reached a total of 668,174 tons, valued at 144,590,000 crowns ($20,156,000) and those of paper and carboard a total of 215,759 tons, valued at 117,727,000 crowns ($16,411,000).

Mechanical Pulp Shipments

The bulk of the mechanical pulp shipments went to European countries, Great Britain, which is the chief customer, taking a total of 354,945 tons, or 75 per cent, and France and Belgium ranking second and third respectively with imports of 50,898 tons and 29,831 tons. The United States was also an important purchaser, sales to that country having aggregated 28,061 tons. All of the foregoing represent increases over 1923, with the exception of exports to the United States which represent a decrease of approximately 20 per cent. Exports of chemical pulp to Great Britain, the United States, and France suffered most heavily during 1924. Approximately 65 per cent of this class of exports were divided between the first two mentioned countries, Great Britain taking 59,650 tons, a loss of 24 per cent compared with the preceding year, and the United States 59,988 tons, a loss of 10 per cent compared with 1923. Exports to France, which ranked third in importance, declined from 30,150 tons in 1923 to 20,931 tons last year.

Increased Sales of Writing Paper

Norwegian exporters were able to increase their sales of printing and writing paper to European countries and to India, Japan, and Australia in the Far East, sales to the former region showing a gain of 9 per cent and to the latter of somewhat less than 3 per cent during 1924. Exports to both the United States and South American countries, however, show a decrease as compared with the previous year, the former by 43 per cent and the latter by 10 per cent. Exports of wrapping paper were almost uniformly small during 1924, shipments to the European countries having decreased from a total of 45,018 tons to 38,846 tons and to the United States from 5,446 tons to 505 tons. Exports to the Far East were also slightly smaller than during 1923, decreased sales to Japan, India, and Australia having reduced the total sales to 14,510 tons, or by 3 per cent, notwithstanding that shipments to China reached 9,670 tons, representing a gain of nearly 50 per cent compared with the previous year's. Exports to South America, which totaled 1,260 tons, were also somewhat larger than in the preceding year.

An Improved Outlook

At the close of the year the outlook as viewed by exporters in the wood pulp branch of the industry indicates a growing demand and promises a continued rise in prices. Norwegian paper manufacturers, on the contrary, view the coming year with some uneasiness owing to the protectionary trend in tariff legislation in several of the leading markets. The labor situation is somewhat uncertain, as the continued rise in Norwegian price levels is expected to lead to demands on the part of laborers for higher wages.

Business Brighter in Boston

[FROM OUR REGULAR CORRESPONDENT.]

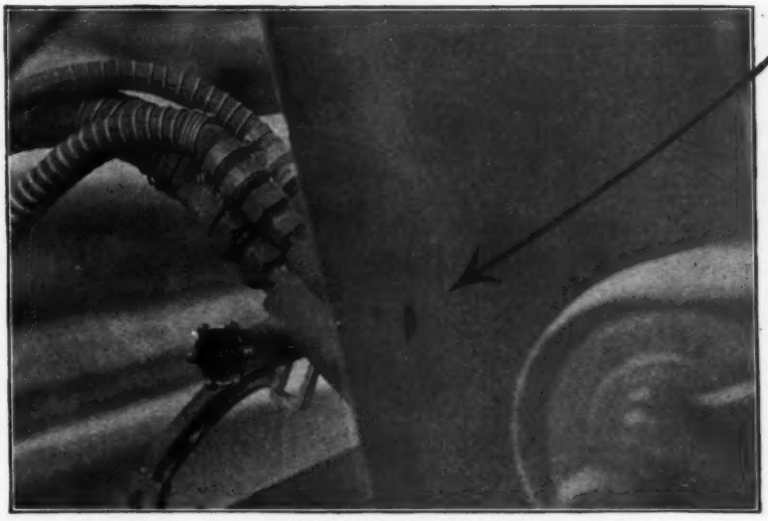
BOSTON, Mass., April 11, 1925.—General business picked up quite noticeably this past week, thus far putting April ahead of any month this year. From now on a gradual improvement is looked for. Easter trade brightened things up in two lines, particularly houses dealing with jobbers and printers and the wrapping division. As Spring advances more inquiries are coming in. Stock rooms that have been allowed to get low are being replenished. Prices remain firm and salesmen outside are reporting some generous orders.

Mills, now fully recovered from the New England freshets, are reported running nearly full time. There is no "boom" or anything approaching it, but leaders admit things are picking up and that the outlook is hopeful. There is a particular demand from the printers who are kept busy with house magazines, advertisements, and direct-by-mail work. This means excellent business in the fine division. In the coarse branch things also are picking up. The boxboard men shared in some good Easter business and with general trade conditions improving they are in line for a more stable business.

Two houses already report a generous advance business in high grade engraving papers and stock used in weddings and school graduations. The lull in the clothing and textile business is keeping rag stock practically out of the market. This stock is hard to get and very little of it is to be found in warehouses.

Merchants who returned from the New York convention had nothing but words of praise and all share in the belief that the many sessions aided them in various ways.

This Little Spot



CLOSE-UP OF THE VICKERY FELT CONDITIONER AT WORK

is the current of water which flows from the Vickery Felt Conditioner through the felt and back again, gently massaging each strand of yarn, keeping the felt soft, open, and pliable, and carrying away the stuff that fills pores, hardens fibres, and balks quality.

of 149 Vickery Conditioners already sold, 78 were repeat orders.

A WASHUP WITHOUT THE INCONVENIENCE OF A SHUT-DOWN

BIRD MACHINE COMPANY
South Walpole Massachusetts

BIRD MACHINERY

7908

Paper Bags Gaining Favor With Cement Shippers

The cement manufacturers of this country, who now make more cement than all the rest of the world combined, are using more and more paper bags in shipping their product. Interest in paper bags has received a decided impetus through the recent development of a new bag made of four layers of kraft paper. This multi-wall bag made in Chicago, seems to be meeting with increasing favor among cement shippers.

The great majority of cement is still shipped in bags of cotton or jute, which are favored because they can be used over and over again. In 1924, estimates place the fillings of cloth bags at over five hundred million. In the same year it is estimated fifty million paper bags were used, showing that the paper containers are yet greatly in the minority. However they are gaining ground steadily. In 1922 eighteen million were used, and in 1923 this figure jumped to more than forty million.

This increase in numbers of paper bags used cannot be attributed entirely to growth of the cement industry, for cement shipments have not increased proportionately, although the industry has shown considerable progress. In 1922 approximately 115 million barrels of cement were made, and in 1924 nearly 150 million barrels, but the present productive capacity of the industry is still much in excess of annual output. During the same period paper bags jumped from eighteen million to fifty million, an increase of nearly two hundred per cent, indicating clearly a distinct shift in favor from cloth to paper. If this rapid increase in demand continues, the paper bag may in time become a serious competitor of the cloth bag for the majority of the cement carrying business.

Cloth bags are much more expensive in first cost. Osnaburg cotton sacks are now selling at eighteen cents apiece, and jute sacks at slightly less, while paper containers sell for five cents. Paper bags of course are used but once, while cloth sacks on the average make about eight trips. However, a great deal of work is required between trips to sort, clean, mend, tie and store them.

Manufacturers of paper bags make wide use of a mixture of kraft, a kind of spruce pulp, and rope fiber, such as manila. The fiber most often used is obtained from junk rope, gathered from all corners of the world. It has been found that this old rope fiber makes stronger paper than the new manila hemp.

The average weight of the different papers used is now about 390 pounds to the thousand bags. A tough paper is required, as cement is a heavy material, and the sacks receive rough handling on construction jobs. Each bag contains ninety-four pounds of cement, which occupys just a cubic foot.

The Multi-Wall Bag

The new multi-wall bag is an all kraft bag, having no admixture of rope fiber. It is marketed by the inventors of the automatic valve filling device for bags, now used almost universally on cement bags. The four thicknesses of paper in the new kraft bag are said to provide extra strength against shock and to avoid brittleness, thus overcoming the greatest defects of the ordinary paper bag. They also provide dead air space, which protects the cement from damage by moisture of "air setting." The new bag is really four paper bags, one inside the other, like layers of bark on a tree. Seams across the top and bottom of the bag, through a kraft tape reinforcement, take the place of the usual glued joints. The weight averages 525 pounds per thousand, but despite this greater weight the new type sells for about the same price as the single wall bag.

The "One Way" Valve

These bags are equipped with the Bates valves, which is used on practically all cloth and paper cement sacks, and is also widely used for other building materials. The bag is completely sewed up before filling, with the exception of the valve at one corner, which is simply a flap through which an inch tube is inserted for filling with cement. After the bag is filled, it is up ended, and the weight of the cement holds the flap shut. This valve makes the bag like an old fashioned rat trap—easy to get in but hard to get out. It's a "one way" bag.

Cloth vs. Paper

The merits of paper bags versus cloth bags have been extensively discussed by cement manufacturers and builders using this material. Cotton and jute are the materials used in cloth bags.

Users of cloth bags are paid by the manufacturers for the bags they return. This is an incentive to save the bags and keep them in good condition. However, about one bag out of every eight shipped fails to be returned to the manufacturers, causing financial loss to both parties. This loss is obviated with the paper bags. The expense to the users of returning the clot bags, and the manufacturer of sorting, cleaning and repairing them is eliminated where paper bags are used.

Paper bags are more quickly handled on a construction job, as no time is lost in untying them and shaking them out. They are simply ripped open and thrown away.

With the cement shippers of the United States now needing nearly six hundred million sacks a year, it is easily seen that this increasing demand for paper bags holds interesting possibilities for paper goods manufacturers.

Obituary

Edward C. Rogers

[FROM OUR REGULAR CORRESPONDENT.]

SPRINGFIELD, Mass., April 14, 1925.—Edward C. Rogers, aged 86, died yesterday at his home, 38 School street, following a heart attack last Friday. He was born at Ogden, N. Y., May 6, 1838. In 1866 he became treasurer of the Holyoke Paper Company. Mr. Rogers retained this position until 1868, when he went to the Greenleaf and Taylor Company as treasurer and manager. The company name was changed to the Massasoit Paper Manufacturing Company in 1873 and a new mill was built at Holyoke and the capital was increased to $300,000. Mr. Rogers became president of the company in 1882, when the Massasoit Company took over the Chester Paper Mill at Huntington. This company was absorbed by the American Writing Paper Company later on and Mr. Rogers was elected to the board of directors of the latter corporation, holding a directorship for many years in addition to managing the Chester branch in Huntington for the American Writing Paper Company.

At the time of his death, Mr. Rogers was a director in the Saugerties Manufacturing Company of Saugerties, N. Y., and the American Paper and Pulp Association. Mr. Rogers was one of the founders of the Paper Mill Fire Insurance Company of Boston and a past secretary and treasurer of the American Paper Manufacturers' Association.

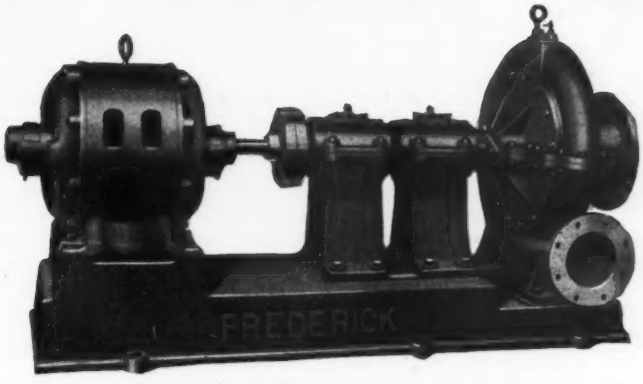
Thomas H. Thorpe

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 14, 1925.—One of the last of the old guard of papermakers that came to Holyoke from Lee about 50 years ago passed away this week in the death Sunday of Thomas H. Thorpe. Mr. Thorpe was for years superintendent of calenders at the Parsons Division of the American Writing Paper Company, known in earlier days as the Parsons No. 1 mill.

Mr. Thorpe was born in Lee, coming to Holyoke 52 years ago, He leaves besides his wife six sons and two daughters.

FREDERICK PUMPS



Mr. Paper Mill Man:

LOOK THIS OVER!!

A Frederick 6″ paper mill pump is built with the following specifications:

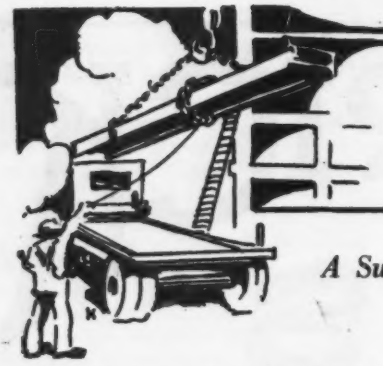
Size of discharge—6″
Size of suction—8″
Pump casing minimum metal thickness—⅞″
Impeller of cast iron or acid resisting bronze
Shaft of chrome nickel steel
Size of shaft in bearing—2¾″
Size of shaft at impeller—2½″
Plain bearing babbitted—2¾″ x 9″
Thrust bearing is five collar marine cut out of solid shaft
Net weight of pump—1300 lbs.
Net weight of base—1000 lbs.

Guaranteed efficiencies on this size pump range from 50% to 65%, depending upon the consistency of stock handled.

The Frederick Iron & Steel Company

FREDERICK, MARYLAND

In Canada—DOMINION ENGINEERING WORKS, LTD., Lachine, Quebec



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Kalama, Wash.—The Lewis River Pulp & Paper Company, is clearing site for its proposed local mill, and plans to proceed with foundations at an early date. The plant will consist of a number of one-story units, with power house, machine shop auxiliary structures, reported to cost in excess of $500,000, including equipment.

Danville, Ill.—The Sears Paper Box Company has awarded a general contract to Arthur Kramp, 1017 East Seminary street, for the construction of a new one-story and basement building on local site. It will be 60 x 127 ft., and will be equipped primarily for storage and distributing service. Harvey F. Skaddon, 519 Temple Boulevard, is architect. Mearl Sears is president.

Port Wentworth, Ga.—In connection with the acquisition of the local plant of the Atlantic Paper & Pulp Corporation by the Georgia Pulp Company, of Massachusetts, the purchasing company is said to have preliminary plans under way for improvements in the mill, including replacements of present equipment, as required, and the installation of additional apparatus. It is expected to take over the property at an early date. The Georgia Pulp Company was organized recently with a capital of 1,000 shares of stock, no par value. Thomas Gorham, 44 State street, Boston, is treasurer; Frank D. Comerford, 60 State street, is also interested in the company.

Detroit, Mich.—The Detroit Waste Paper Company, 687 Wilkins street, plans for the immediate replacement of damage at its plant caused by fire recently, with loss approximating $12,000. The new work will be close to a like amount.

Malone, N. Y.—The Malone Pulp & Paper Company has awarded a general contract to H. I. Jones, 9 Grove street, for the construction of its proposed local mill addition, to be one-story, 35 x 42 ft., estimated to cost about $35,000. Work will proceed at an early date.

St. Paul, Minn.—The Waldorf Paper Products Company, 2314 Carroll avenue, is arranging an expansion program to cost about $750,000, the majority of the work to be placed under way during the next few months. It is proposed to construct a number of one-story plant units, similar to the building for which plans recently were filed, 80 x 340 feet, at Hampden and University avenues; work on this structure has been placed in progress, it will cost approximately $150,000. Plans for the second building, it is stated, will soon be completed.

Lansdale, Pa.—A new company is being organized by Benjamin Chalick, and associates, to take over the local plant formerly used by the Wagner Process Company, manufacturer of stamped metal goods. The new company will remodel and equip the structure for the manufacture of wall paper and kindred paper products. It is proposed to begin operations at an early date.

Bromptonville, Que.—The Brompton Pulp & Paper Company has preliminary plans under way for the construction of a new mill on local site, comprising several buildings, reported to cost in excess of $500,000, with equipment. At a recent meeting of stockholders the company was authorized to issue bonds in an amount not exceeding $7,000,000, a portion of the proceeds to be used, as required, for expansion purposes.

Three Rivers, Que.—The Wayagamack Pulp & Paper Mill is proceeding with the construction of a new local plant, and contracts are being given out for ground wood mill machinery, news print machinery and auxiliary equipment. It is proposed to begin the installation of machinery at the earliest possible date. The project is reported to involve in excess of $600,000. Charles Walmsley & Co., Ltd., London, England, has received an award for a portion of the equipment.

Three Rivers, Que.—The Canadian International Paper Company, Ltd., operated by the International Paper Company, 100 East Forty-second street, New York, has preliminary plans under way for the construction of a hydroelectric power plant on the Gatineau River, near Hull, Que., originally projected a number of weeks ago and held in temporary abeyance. The plant will be used for mill service in this district, and is estimated, to cost close to $4,500,000, including transmission system, substations, etc.

New Companies

Newark, N. J.—The Eastman Company, Inc., has been incorporated with a capital of $125,000, to manufacture cardboard and kindred specialties. The incorporators are Denis Eastman, Joseph L. Reid and Harry F. Hughes. The company is represented by Cohen & Klein, 247 Market street, Newark.

New York, N. Y.—The Original Paper Box Company has been incorporated with a capital of $10,000, to manufacture paper boxes and containers. The incorporators are L. Santos, D. Bonamassa and F. Ross.

Monroe, Mich.—The Michigan Board & Paper Company has been organized by local interests, with capital of $25,000, to manufacture paper box, board and other paper specialties. It is headed by J. D. Miller, Monroe, who will act as president.

Fort Worth, Tex.—The Bunker Paper Box Company, Inc., has been incorporated with a capital of $30,000, to manufacture paper boxes and containers. The incorporators are Chester R. Bunker, George W. Schalack and C. C. Cophaw, all of Fort Worth.

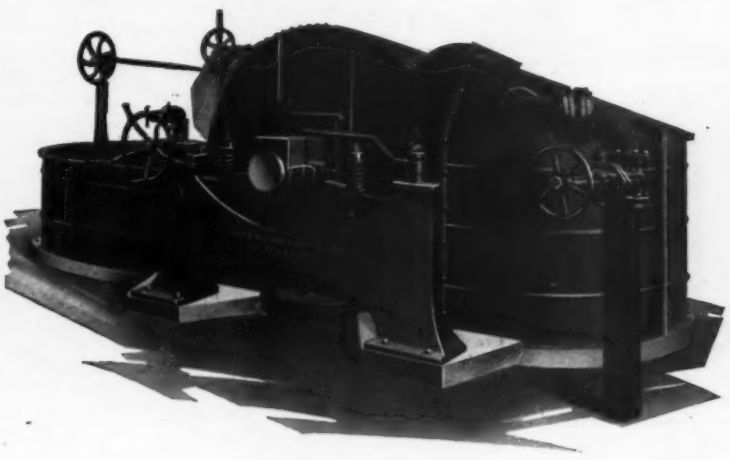
Springfield, Mass.—The New England Card & Paper Company, Inc., has been incorporated with a capital of $150,000, to manufacture cardboard and other paper products. Hobart B. Swan is president, and Douglas L. Swan, 435 Union street, Springfield, treasurer.

Wilmington, Del.—The Globe Fibre Specialty Company, care of John B. Jester, Wilmington, representative, has been incorporated under state laws, with a capital of $150,000, to manufacture fibre products.

Newark, N. J.—The Converters Paper Company, Inc., has been incorporated with a capital of $125,000, to manufacture and deal in paper products.

Dilts

"Your paper is made



in the beaters"

Are You Interested?

(a) **Foundations in for *three* new beating engines.***

Decided to buy Dilts NEW TYPE Beaters. Put in *two*. Don't need the third. *Two* do the work. Saved the cost of *one* beater.

(b) **Plans called for *five* new beaters.***

Decided to buy Dilts NEW TYPE beaters. Put in *four*. Don't need the *fifth*. *Four* will do the work. Saved the cost of *one* beater.

(c) **News mill***

Formerly put "broke" and "shavings" into beaters. Decided to buy Dilts Continuous Beater. This handles the broke and cuts out three men on each machine. Pays for itself in six months.

**Names of these and other mills on request.*

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

New York Trade Jottings

James Rosenberg, formerly president of the American Woodpulp Corporation, is now a member of the organization of E. J. Keller Company, Inc., 200 Fifth avenue.

* * *

First Vice-President P. B. Wilson of the Spanish River Pulp and Paper Mills, Ltd., stopped here for a short time on Monday, on his return to his home in Sault Ste. Marie, after a two weeks' vacation spent at Sea View.

* * *

Louis T. Stevenson, Mountain Mill Paper Company and Rollstone Paper Company, announce that after Saturday their sales offices will be located at 441 Lexington avenue, Room 503, and that the telephone number will be Vanderbilt 0433.

* * *

Assistant Secretary O. M. Porter of the American Paper and Pulp Association will address the New York Bird and Tree Club this afternoon at a meeting to be held at the American Museum of Natural History. His subject will be "Forestry Work with The Boy Scouts."

* * *

It is probable that a paper simplification conference will be held here within a couple of weeks, in connection with the progress of the paper simplification program which became effective almost a year ago. The meeting will be confined to members of the Committee of the Printing and Paper Trades which handled this program last year.

* * *

The International Coal Corporation, with main office in Montreal, has been organized under the laws of Quebec. The officers are: President, D. Harry Friedman, Jr.; vice-president and treasurer, Hall E. Shepherd, secretary, George A. McHattie; directors, D. H. Friedman, Owen Shepherd, Hall E. Shepherd, D. H. Friedman, Jr. and George McHattie.

* * *

Announcement is made of the establishment of E. M. Strehl, 342 Madison avenue, as a special and direct representative of board and paper mills. Mr. Strehl has had 20 years practical experience, having been connected with United Box Board and Paper Company, the C. L. La Boiteaux Company and Strehl, Otens Company, Inc. The telephone number is Vanderbilt 9516.

* * *

Officials of the Simplified Practice Division of the Department of Commerce who attended the recent meeting of the Tissue Paper Manufacturers in this city, are well satisfied with the progress which has been made in connection with simplication in the tissue paper industry. A further survey is to be made and officials are hopeful that a general conference can be held in Washington sometime in June to be participated in by manufacturers, distributors and consumers, at which time it is expected the simplificaton program can be finally adopted.

* * *

Henry A. Wise, Counsel for the Import Committee of the Paper Industry was in Washington the latter part of last week conferring with officials of the Treasury Department in connection with the postponement of the news print definition hearing which was to have been held on April 17. The hearing has been postponed until May 5 at Mr. Wise's request. It is understood that the postponement has been asked because the American Newspaper Publishers Association will take the matter up at their convention to be held here the week of April 20. Rumors are to the effect that there is a possibility of an agreement between the domestic manufacturers and the newspaper publishers in connection with the proposed new definition.

May Postpone Conference on News Definition

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 15, 1925.—It is possible that the news print definition conference which has been set for April 17 before Assistant Secretary of the Treasury Andrews will be postponed until some later date although no action to this effect has been taken. It is understood that paper importers will ask for such a postponement.

Other rumors which cannot be confirmed here are to the effect that the domestic mills and newspaper publishers are making an effort to get together on the definition. There is no one in Washington, however, who is able to confirm this information.

C. L. La Boiteaux to Be Chairman of Board

CINCINNATI, Ohio, April 14, 1925.—The Republic Paper Board Company announces the retirement of C. L. La Boiteaux as president of the company. He retains his financial interest and will be chairman of the board of directors, acting in an advisory capacity.

Sidney M. Phelan, Jr. has been elected president and general manager and will hereafter have entire charge of the operation of the company and the management of its affairs.

Bradford Paper Co. Starts

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., April 6, 1925.—The new coating plant of the Bradford Paper Company is now in operation. The company is in a position to supply a complete line of coated papers from a high grade rag base folding enamel down to the cheapest grades. The company also supplies an excellent grade of coated offset and C. I. S. Litho.

The company is equipped with both machinery and personnel to produce strictly high grade and uniform coated paper.

Wood Preparing Equipment

A monograph on this subject has been prepared by H. E. Weston, Assistant Professor of Pulp and Paper Manufacture, New York State College of Forestry, Syracuse University, Syracuse. It is presented in attractive pamphlet form, 9 x 12 inches, with 35 pages, and is well illustrated with 45 cuts.

Professor Weston advises that while he has not a great many extra copies, he would be glad to fill the requests of students and others especially interested, so far as his supply will permit.

H. G. Schanche's New Position

At the annual meeting of the Abitibi Transportation and Navigation Company, which was held recently H. G. Schanche, who for the past two years has been manager of the Woods Department of the Abitibi Power and Paper Company, Iroquois Falls, Ont., was appointed general manager of the Transportation and Navigation Company. The past winter was favorable for pulp wood operations. There were four main camps and two secondary camps and from these 50,000 cords of pulp wood were cut, while in addition settlers, near the railway, cut 4,600 cords, which were purchased by the company.

Standard Paper Co. to Build Stock House

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., April 14, 1925.—The R. D. Boyer Company has been granted the contract for the erection of the new stock house at the Standard Paper Company. It will be a corrugated steel structure, forming on immense bin, clear from the floor to the roof, all stock being handled by a monorail system. Mr. Boyer reports that the concrete footings and foundations are nearly completed.

Alexander Calder a Director

At the annual meeting of the Union Bag and Paper Company, Alexander Calder was elected to the board of directors succeeding C. B. Jaqua resigned.

Constant Vibration Would Wreck Pike's Peak—How About Your Beaters?

No machine can stand up for years under continual vibration. Beating engines are no exception and, moreover, rigidity is an absolute necessity if real beating efficiency is to be obtained.

An engine that rests directly on the floor is affected by every variation in the floor's surface. A small sag at one corner of the beater places the machine under a strain that soon causes worn parts.

That is why the *combination lighter bar and stand* is such an important feature of Valley Holland Beaters. In this engine, *the lighter rests on its own sole plate,* and as a result the beater is always rigid, its life is prolonged and greater beating efficiency results.

The combination lighter bar and stand, as a whole, is of liberal proportion, further insuring rigidity, endurance and strength. The posts are massive. The lighter bar is unusually strong and braced to give added strength. This important feature is only one of the patented details that make Valley Holland Beaters so popular with the trade.

Your copy of an interesting booklet is ready. It sets forth all of the other advantages of Valley Beaters, and gives complete information, attractively illustrated. Write for your copy today.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

PAPER AND PAPER STOCKS IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending January 31, 1925, and for the Seven Months Ended January 31, 1925, as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER.

Paper and Manufacturers of	January 1924 Quantity	January 1924 Value	January 1925 Quantity	January 1925 Value	Seven Months Ending January 31 1924 Quantity	Seven Months Ending January 31 1924 Value	Seven Months Ending January 31 1925 Quantity	Seven Months Ending January 31 1925 Value
Paper, except printed matter (total)	.....	$9,483,789	.....	$9,608,037	.....	$68,497,031	.....	$68,143,431
Printing paper—Standard news print lbs. Free	215,187,033	8,234,614	225,171,675	8,174,459	1,550,114,357	58,326,156	1,590,278,772	58,383,774
Imported from—								
Finland	4,978,409	168,109	6,763,603	206,022	39,099,576	1,322,531	39,963,448	1,280,382
Germany	6,632,139	223,559	5,357,868	163,334	65,865,941	2,170,530	31,168,381	935,121
Netherlands	72,951	2,499	20,552	748	231,360	7,525	1,017,960	33,103
Norway	2,872,944	99,445	2,027,416	62,195	32,074,773	1,110,843	26,545,898	830,536
Sweden	9,916,457	317,437	16,538,688	517,560	76,315,465	2,480,514	97,733,183	3,065,080
Canada	190,483,207	7,418,173	192,034,029	7,137,823	1,331,685,752	51,081,689	1,381,640,218	51,824,619
Other countries	230,926	5,392	2,429,519	86,777	4,841,490	152,524	12,209,684	404,933
All other, n. e. s. lbs. dut.	1,643,928	68,098	1,834,735	88,763	10,530,415	502,294	15,177,856	672,539
Grease-proof and water-proof papers lbs. dut.	263,144	22,999	127,782	13,501	1,860,522	173,677	671,405	79,631
Wrapping paper lbs. dut.	.....	.....	.....	.....	[1]44,709,325	[1]1,939,824	.....	.....
Kraft wrapping paper lbs. dut.	2,882,736	109,735	1,683,307	67,752	[2]2,882,736	[2]109,735	12,945,344	524,251
All other, wrapping paper lbs. dut.	2,276,385	83,467	949,388	38,913	[2]2,276,385	[2]83,467	9,126,874	370,823
Writing, drawing, bond, etc. lbs. dut.	222,773	34,282	214,435	57,958	1,748,640	318,217	1,826,701	437,801
Surface coated lbs. dut.	84,770	21,716	164,758	38,301	671,681	162,154	1,247,092	288,483
Tissue paper lbs. dut.	245,018	97,697	161,692	93,254	1,248,713	499,729	1,480,658	593,642
Paper boards—								
Pulp boards in rolls lbs. dut.	6,237,520	186,492	5,943,257	180,264	43,553,442	1,250,985	37,800,248	1,035,713
Other paper boards, n. e. s. lbs. dut.	1,775,350	45,562	3,404,129	77,627	13,881,891	412,582	18,254,585	420,205
Cigarette paper, cigarette books and covers lbs. dut.	577,414	127,799	1,020,125	270,826	5,908,015	1,519,195	6,193,779	1,767,744
Photographic paper lbs. dut.	226,811	40,697	149,298	32,261	1,574,120	328,018	1,586,830	333,083
Hanging paper lbs. dut.	2,596,387	91,513	779,792	55,006	8,811,544	375,896	7,410,692	333,267
Paper boxes lbs. dut.	112,225	74,701	203,973	132,059	[3]112,225	[3]74,701	1,261,866	838,998
Decalcomania, not printed lbs. free	9,175	2,206	51,014	11,855	202,461	51,282	316,488	75,114
All other dut.	.....	242,211	.....	275,238	.....	2,369,109	.....	1,998,363
Books and other printed matter (total)	.....	558,130	.....	840,689	.....	5,286,547	.....	6,537,999
Books and pamphlets in foreign languages lbs. free	140,520	75,346	138,223	148,756	1,143,368	601,622	1,438,554	950,841
Books, maps, music, etc., 20 years old lbs. free	16,176	63,448	24,530	223,824	207,892	922,433	236,577	1,424,256
Other books, etc. lbs. free	154,557	100,376	199,232	111,177	1,226,658	814,714	1,425,949	1,139,127
Books, pamphlets and music, n. e. s. lbs. dut.	229,478	156,935	208,198	169,054	2,046,174	1,446,121	1,885,263	1,420,302
Maps, charts, and other printed matter, n. e. s. dut.	.....	57,567	.....	87,155	.....	468,150	.....	524,047
Lithographically printed matter, n. e. s.—								
Cigar bands, labels and flaps lbs. dut.	13,171	15,332	5,775	7,356	153,997	135,546	48,595	69,637
Decalcomanias lbs. dut.	18,963	28,054	25,099	36,843	135,617	195,552	147,597	217,157
All other dut.	.....	61,072	.....	56,524	.....	702,409	.....	792,632

CRUDE PAPER STOCK.

Rags for paper stock lbs. free	25,802,558	552,297	56,343,973	1,640,693	223,274,968	4,008,029	340,454,319	8,643,209
Waste bagging, waste paper, etc. lbs. free	6,370,418	77,387	11,662,148	191,898	56,723,412	696,674	69,553,086	897,292
Old rope and all other paper stock lbs. free	8,451,577	473,589	6,115,114	333,044	54,436,369	2,666,346	51,487,586	2,747,707

WOOD PULP.

Mechanically ground tons free	16,201	621,404	20,056	636,070	159,859	5,643,989	150,201	4,802,422
Chemical wood pulp—								
Sulphite, unbleached tons free	42,260	2,502,780	61,744	3,303,897	271,467	16,461,218	389,859	20,611,327
Sulphite, bleached tons free	17,604	1,441,230	29,951	2,206,556	135,933	11,802,432	181,014	13,434,730
Total sulphite tons	59,864	3,944,010	91,695	5,510,453	407,400	28,263,650	570,873	34,046,057
Imported from—								
Finland	1,269	78,849	4,823	224,151	27,453	[4]1,752,464	31,017	[4]1,572,416
Germany	5,366	317,651	5,668	317,590	35,020	2,480,986	53,141	3,079,290
Norway	3,911	286,154	4,431	294,054	33,051	2,771,576	42,533	2,896,691
Sweden	24,434	1,559,924	43,283	2,485,354	130,751	8,654,912	227,938	12,611,129
Canada	23,703	1,633,095	30,053	1,949,755	168,785	12,082,735	197,329	12,794,772
Other countries	1,181	68,337	3,437	239,549	12,340	520,977	18,915	1,091,759
Sulphate pulp, unbleached (kraft pulp) tons free	18,691	1,136,947	31,124	1,741,556	146,423	9,538,673	191,716	10,711,383
Imported from—								
Finland	252	14,740	1,038	50,779	4,889	305,370	8,760	420,947
Norway	586	36,692	885	49,247	5,804	374,371	8,475	456,491
Sweden	8,581	475,351	18,939	1,017,047	58,466	3,613,554	103,364	5,386,810
Canada	9,202	606,045	10,262	624,483	75,742	5,138,787	67,901	4,278,376
Other countries	70	4,119	.....	.....	1,522	106,591	3,216	168,759
Sulphate pulp, bleached tons free	88	5,774	4,073	225,220	5,020	354,094	29,373	1,627,038
Other pulp tons free	30	2,991	107	11,823	5,646	343,641	1,063	66,457

CHEMICALS AND OTHER PAPER MAKERS' MATERIALS.

Colors, dyes, stains, color acids, and color basis, n. e. s. lbs. dut.	307,724	418,060	643,708	864,749	1,777,003	2,460,496	2,461,944	3,363,933
Imported from—								
France	7,232	10,114	9,388	11,761	133,653	219,428	68,793	100,073
Germany	133,308	146,209	391,395	602,933	890,904	1,121,623	1,277,413	1,838,357
Italy	21,135	28,290	18,153	20,812	119,649	169,819	83,273	122,746
Switzerland	112,589	182,363	161,735	178,545	476,923	756,644	774,851	1,019,350
United Kingdom	1,059	2,271	19,612	14,987	51,836	58,184	50,200	74,623
Other countries	32,401	48,813	43,425	35,711	104,038	134,798	177,414	208,784
Casein or lactarine lbs. dut.	1,219,777	154,461	1,441,935	98,938	8,924,444	1,289,704	9,455,376	670,936
Kaolin, china and paper clay tons. dut.	21,694	224,766	14,875	162,579	146,418	1,542,401	165,677	1,565,947

[1] July 1 to Dec. 31, 1923. [2] Beginning Jan. 1, 1924. [4] Beginning Jan. 1, 1925.

(*Continued on page 44*)

The BELOIT Shake

15% INCREASED PRODUCTION

SIXTEEN orders, of which four are re-orders, demonstrate the remarkable achievements of the New Beloit Shake, which has been on the market only a short time. In one mill its application showed an increase in production of 15% within a few days after its installation, with more than a corresponding improvement in the formation of the sheet being run.

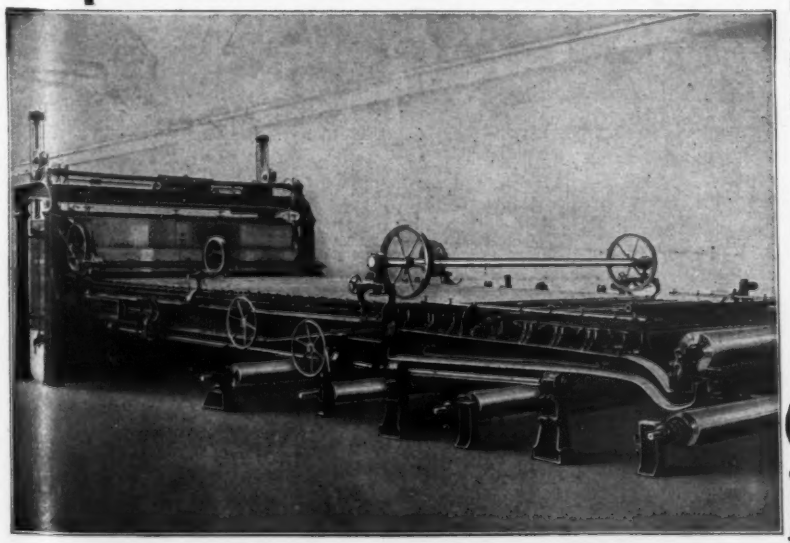
This advancement in paper making has demonstrated conclusively on fine tissues that it can produce a better formed sheet *at a higher speed.*

Proof in abundance is at hand to prove the absolute efficiency of this New Fourdrinier:

Operating on Kraft, tests have been made over long periods of time of from 68 to 72 on a 50-pound sheet, or from 36 to 44 per cent more than the usual "point to the pound."

A recent installation on sulphite papers shows tests of 37 points on a 39-pound sheet.

On another "Beloit" machine making Kraft, the paper is testing 127 per cent, while a machine of another make in the *same* mill, running 25 percent slower on the *same* stock, produces paper testing but 93 per cent. Thus, the "Beloit," with the disadvantage of *higher* speed, is producing *a better formed* and *higher test* sheet than that made on the other.



These and many similar facts will convince the most skeptical that the superiority and efficiency of the revolutionary "Beloit" Fourdrinier has been proved in practice and not by theory.

Write for Bulletin No. 9 for further information and facts

The NEW BELOIT FOURDRINIER

Beloit Iron Works — **Established**

BELOIT IRON WORKS BELOIT WIS

Beloit, Wis., U.S.A. — **Since 1858**

PAPER AND PAPER STOCKS IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 42*)

EXPORTS—PAPER

Paper and Manufacturers of	January 1924 Quantity	January 1924 Value	January 1925 Quantity	January 1925 Value	Seven Months Ending January 31 1924 Quantity	Seven Months Ending January 31 1924 Value	Seven Months Ending January 31 1925 Quantity	Seven Months Ending January 31 1925 Value
Paper, except printed matter (total)	.....	$1,997,376	.....	$1,807,305	.....	$14,084,820	.....	$13,617,615
Printing paper—								
Newsprint paper ....lbs.	3,364,343	181,754	3,146,700	130,890	18,362,332	922,673	18,853,857	950,675
Exported to—								
Canada ....lbs.	105,115	8,347	53,457	4,477	720,294	58,056	428,271	32,099
Central America ....lbs.	40,358	1,898	26,199	1,440	663,090	32,157	365,373	20,972
Mexico ....lbs.	186,125	10,322	148,313	6,038	810,471	44,414	1,140,598	60,427
Cuba ....lbs.	1,879,673	88,769	773,416	28,973	10,890,651	498,649	8,423,593	364,969
South America ....lbs.	243,115	16,130	1,735,317	69,625	1,048,623	56,886	3,233,700	158,597
Japan ....lbs.	107,074	6,331	.....	.....	878,825	55,923	190,772	15,126
Philippine Islands ....lbs.	432,208	22,733	324,126	16,115	2,373,747	115,026	2,419,514	112,866
Other countries ....lbs.	370,675	27,224	85,872	4,222	976,631	61,562	2,652,036	185,619
Book paper, not coated ....lbs.	1,370,430	151,648	1,349,487	142,802	13,949,281	1,589,126	12,183,829	1,311,491
Exported to—								
United Kingdom ....lbs.	114,250	13,270	10,451	2,009	426,201	81,935	271,576	59,154
Canada ....lbs.	152,198	19,076	163,958	19,331	1,085,957	141,726	861,538	108,788
Central America ....lbs.	43,216	5,117	69,954	7,169	502,309	62,098	373,830	40,771
Mexico ....lbs.	68,646	8,854	227,653	29,399	895,855	109,083	1,547,892	172,293
Cuba ....lbs.	303,351	33,543	409,450	31,097	2,987,057	327,169	2,527,188	258,578
Argentina ....lbs.	30,213	3,740	74,737	8,185	492,543	68,933	376,475	40,190
Brazil ....lbs.	4,168	989	12,039	1,613	383,044	43,901	216,530	27,196
Venezuela ....lbs.	11,223	1,241	18,908	2,558	325,156	34,740	251,883	29,008
Other South America ....lbs.	88,408	15,684	73,278	8,020	763,513	94,213	813,135	90,838
China ....lbs.	62,634	4,849	41,415	6,188	2,116,254	204,332	3,282,360	295,520
Japan ....lbs.	63,188	7,158	25,250	2,728	1,150,708	111,599	133,043	14,507
Philippine Islands ....lbs.	113,307	8,333	92,687	9,284	1,494,078	139,911	683,382	66,836
Australia ....lbs.	46,067	5,038	35,227	3,681	531,550	71,984	298,820	32,675
Other countries ....lbs.	269,561	24,756	94,480	11,540	795,056	97,502	546,177	75,137
Cover paper ....lbs.	77,389	13,934	95,660	16,558	663,606	116,450	555,787	106,735
Grease proof and waterproof paper....lbs.	198,525	24,502	151,222	16,830	1,034,595	138,316	821,078	97,414
Wrapping paper—								
Kraft paper ....lbs.	77,092	8,469	28,921	2,590	584,468	58,021	335,393	36,587
Other wrapping ....lbs.	1,755,577	150,113	2,251,106	185,109	13,819,228	1,146,060	14,722,258	1,128,406
Surface-coated paper ....lbs.	297,841	60,651	245,049	37,718	2,162,215	332,343	2,068,982	289,150
Tissue and crêpe paper ....lbs.	262,302	61,774	298,865	75,345	2,094,527	544,165	1,942,877	533,639
Toilet paper ....lbs.	206,600	25,269	411,134	59,097	2,352,153	265,063	2,569,782	316,288
Paper towels and napkins ....lbs.	141,193	16,232	85,516	10,335	746,721	129,888	786,079	128,337
Box board ....lbs.	.....	.....	770,437	31,827	.....	.....	[2]770,437	[2]31,827
Bristols and bristol board ....lbs.	102,549	16,405	64,694	6,560	929,348	83,303	421,644	52,399
Other paper board and strawboard....lbs.	5,704,224	236,732	2,235,480	105,781	35,449,513	1,583,031	36,401,712	1,361,709
Sheathing and building paper ....lbs.	414,848	17,543	1,176,822	56,631	2,454,883	116,258	6,125,335	299,279
Wall board of paper or pulp ....Sq. ft.	1,748,143	59,780	1,379,735	57,879	11,763,131	423,043	9,168,401	323,648
Blotting paper ....lbs.	257,092	30,644	240,114	29,348	[1]257,092	[1]30,644	1,507,517	179,563
Filing folders, index cards, and other office forms ....lbs.	35,150	12,450	50,346	13,939	[1]35,150	[1]12,456	269,156	87,543
Papeteries (fancy writing paper)....lbs.	20,740	8,903	18,754	7,168	244,333	100,000	302,841	103,130
Other writing paper ....lbs.	803,788	104,124	283,412	29,975	3,628,805	625,939	2,110,032	333,088
Cigarette paper and books....lbs.	97,383	28,491	50,649	16,667	481,910	151,751	321,877	110,010
Photographic paper ....lbs.	126,460	129,943	142,010	129,881	861,345	774,849	927,989	845,542
Paper hangings (wall paper) ....yards	2,865,890	73,318	3,230,286	75,904	13,099,615	311,223	12,464,915	303,136
Paper bags ....lbs.	637,908	79,496	1,099,560	98,896	4,426,235	495,190	6,416,640	550,275
Boxes and cartons ....lbs.	908,950	81,744	794,295	74,254	6,272,263	633,272	7,887,030	705,628
Carbon paper ....lbs.	59,070	42,755	73,230	59,403	493,855	382,385	504,043	405,849
Envelopes ....lbs.	155,961	38,089	228,988	42,193	1,606,565	327,677	1,504,057	284,868
Cash register and adding machine paper.lbs.	98,317	11,303	93,156	9,626	771,565	86,395	741,636	78,311
Other paper and paper products....lbs.	2,114,925	331,304	1,557,383	284,099	16,542,861	2,705,299	26,365,812	2,663,088
Books, maps, pictures, and other printed matter (total)	.....	1,621,625	.....	1,381,731	.....	11,644,736	.....	11,692,854
Books and pamphlets ....lbs.	2,527,451	876,531	3,004,631	681,678	17,162,229	5,646,742	20,695,271	5,706,744
Maps and charts ....lbs.	9,364	8,726	7,351	9,267	83,464	90,837	120,758	107,769
Music in books or sheets ....lbs.	43,921	28,211	47,571	25,133	378,646	218,147	389,739	235,753
Souvenir post cards ....lbs.	17,922	10,245	28,402	17,821	380,824	148,896	212,072	127,048
Lithographically printed matter, except post cards and maps ....lbs.	168,572	182,081	239,052	109,617	1,246,333	934,378	1,528,456	1,082,234
Playing cards ....packs	367,110	54,225	533,436	52,451	4,096,780	471,202	4,056,393	426,804
Other printed matter ....lbs.	1,458,114	461,606	1,579,442	485,764	11,530,197	4,134,534	11,189,814	4,006,502

WOOD PULP AND PAPER STOCK.

Sulphite wood pulp ....tons	1,255	75,017	1,733	96,995	8,756	500,272	13,113	792,262
Soda wood pulp ....tons	.....	.....	169	16,293	990	93,984	1,066	100,966
Other wood pulp ....tons	40	3,817	1,638	158,716	2,206	120,638	5,207	521,675
Rags, and other paper stock....lbs.	8,858,547	146,246	14,148,611	190,664	73,329,091	1,198,827	72,305,466	1,170,123

PAPER AND PULP MILL MACHINERY.

Paper and pulp mill machinery....lbs.	2,812,413	488,394	407,153	88,537	6,505,556	1,240,040	5,179,471	1,077,293

[1] Jan. 1 to Jan. 31. [2] July 1 to Dec. 31.

The illustration shows an A-S-H Standardized Coal Bunker of 200 tons capacity at the Columbian Paper Co., Buena Vista, Va. Note the true "catenary curve" of the bunker.

Products include:

ASH GATES

SECTIONAL CAST IRON ASH HOPPERS

STANDARDIZED ASH SLUICING SYSTEMS

ASH "KWENCHERS" FOR ALL TYPES OF HOPPERS

CAST IRON "CATENARY CURVE" COAL BURNERS

ASH STORAGE BUNKERS

AIR COOLED BOTTOMS FOR POWDERED FUEL FURNACES

Specify A-S-H Equipment

Patented

A Cast Iron COAL BUNKER Will NOT RUST OUT

and because of "standardization," this bunker is moderate in price.

If your labor can read a blueprint and can turn a standard nut on a standard bolt with a standard wrench, they can erect this "standard" bunker. There is no need to pay high priced factory experts, our standardized system saves you all of that expense.

When you buy the A-S-H Bunker, you can rest assured that it will last a lifetime, with virtually no upkeep expense. Every part of the bunker that comes in contact with the coal is cast iron, as this metal will stand up indefinitely under the action of sulphurous water.

The A-S-H Bunker requires no lining, thereby saving that expense. Since no concrete, brick or any other lining is needed, its dead load is at minimum, therefore, the expense of heavier foundations and superstructure is also saved.

If you want a coal bunker whose first cost is moderate and whose maintenance is practically nil,—buy an A-S-H "Standardized" Cast Iron Catenary Coal Bunker and bolt it up yourself.

This Bunker is built by the makers of the A-S-H Water Tight Ash Gates. These Gates, which collect 100% of the water, 100% of the time, have achieved an outstanding success in many of the Nation's leading power plants.

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PAPER TRADE JOURNAL
ESTABLISHED 1872
With Which Is Combined
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HENRY J. BERGER, Editor

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CANADIAN PULP MEN AGAINST PULPWOOD EMBARGO

It is announced in the Canadian press that manufacturers of chemical pulp have protested against the recent resolution of the Canadian Pulp and Paper Association calling upon the Government to establish a graded export tax on pulpwood, and have requested a re-opening of the question. Representations are also said to have been made to the Federal and Provincial Governments. The manufacturers, it appears, fear that any movement to restrict the export of pulpwood would result in retaliation on the part of pulp interests in the United States, and that a customs duty would be placed on chemical pulp to restrict its free movement into the States.

In this connection much attention has been attracted to a review of the pulpwood embargo question contained in the Convention Number of the PAPER TRADE JOURNAL, and especially to the announcement therein made that the U. S. Government some time ago enacted a special clause providing that if any country forbade or restricted in any way the exportation of or imposed any export duty or export license fee or other export charge of any kind, on printing paper, chemical wood pulp or wood for use in the manufacture of wood pulp, there would be imposed upon chemical wood pulp imported from such a country "an additional duty equal to the highest export duty or export charge imposed by such a country . . . upon either an equal amount of chemical wood pulp or an amount of wood necessary to manufacture such wood pulp, or an amount of printing paper ordinarily manufactured from such chemical wood pulp."

Even under present conditions Canadian manufacturers are not holding their own in the American market. In 1917, for instance, the United States imports of chemical pulp from Canada were 223,000 tons, and from Europe 175,000 tons. In 1919 the imports were 317,000 tons from Canada and only 115,000 tons from Europe. In 1920 imports from Canada were 407,000 tons and from Europe 265,000. From then on, however, European shipments to the United States exceeded those of Canada. The margin held by Europe, however, was not marked until the past year, when the difference between European and Canadian shipments increased from 104,000 tons (in 1923) to 261,000 (for 1924). That is, in that year Canadian shipments were 507,000 tons and European 769,000 tons.

In discussing the problem editorially, the "Financial Times" of Montreal says:

"The chemical pulp industry of Canada, involving an export value of over $30,000,000 a year, is not only not invulnerable in its United States market, but is falling behind in the race for supremacy with Scandinavian competitors. The peculiar conditions that demand a continuous supply of news print from the same producing mill not only month after month but year after year, for the individual publisher, do not apply to the chemical pulp industry, nor are the chemical pulp mills of Canada able to show an advantage in the way of cost over their Scandinavian rivals.

"In other words, the case comes down to a point where Canada cannot go its own way and be assured of maintenance of a market for chemical pulp in the United States, regardless of any action that may be taken across the border. It cannot maintain an attitude of independence such as the news print producers of Canada are easily able to maintain. The conversion mills of the United States may turn away to a considerable extent from the Canadian supply of chemical pulp and find supplies of their 'raw' material either from the surplus capacity of their own mills, or from the increased supplies that Europe can readily export to them.

"It would seem that a retaliatory tariff of 5 or 10 per cent against Canadian chemical pulp imposable in the event of a Canadian embargo or heavy export tax, is quite within the possibilities of legislation, and this possibility must now be added to the list that has been already stabilized by those who have urged that extreme caution must be exercised by this country before any national step is taken to interfere with the export of pulpwood from this country.

"We would urge those who have rather too readily accepted the somewhat highly colored stories in favor of a national embargo to study the chemical pulp situation as it is outlined in an article in the current issue. More and more it is becoming evident that the weapon of the embargo may become a two-edged sword, as hurtful or even more hurtful to the country that draws it first as to that market it would seek to restrict. The 'national' grounds that are entreated may prove to be composed of quicksands instead of the seemingly firm foundation that has been represented by the advocates of a pulpwood embargo."

TRAINING FOR THE PAPER INDUSTRY

To judge by the character of the inquiries received by the PAPER TRADE JOURNAL and those circulated privately for men to fill the more important positions in the mills, the demand is growing for either a sound practical experience combined with a certain amount of technical training, or else a technical college training with a good deal of practical experience. It is the combination of the technical and practical that is emphasized in most of the inquiries.

The production manager over several mills making fine papers has interviewed scores of men in an endeavor to secure an assistant. He must be a technically trained man, thoroughly experienced in the preparation of rags and also in the machine operation on the highest grades.

The manager of a kraft paper mill, making its own pulp, wants a young technical man who has had some mill as well as laboratory experience, to train for future advancement.

A plant in which a diversified line of papers is made from wood pulp is on the lookout for two young men who are experienced in the modern methods of making groundwood and sulphite.

A mill making various kinds of paper as well as the pulp for them, inquires for a chemist with practical experience in either paper or pulp.

A sulphite mill is asking for a chemist who knows the cooking processes as well as methods of control for quality.

While in a few plants efforts are being made to give the technical men some mill experience and the practical men some training along technical lines, in most cases the mills, while recognizing the need, expect men to come already provided with the desirable combination of technical training and practical experience.

When the Technical Association of the Pulp and Paper Industry and the Technical Section of the Canadian Pulp and Paper Association were formed ten years ago, the need for this kind of training was recognized. To bridge the gap between theory and practice, which was then very wide, the first task of the Joint Committee was to prepare a set of textbooks on the *Manufacture of Pulp and Paper*. The five volumes covering the subject have just been completed after six years of strenuous labor, the finances for which were supplied by the industry of Canada and United States.

When the textbooks were in preparation correspondence courses based on them were provided by three different agencies and several hundred students have been enrolled.

Both the textbook and the courses have been well received but it is plainly evident that much remains yet to be done in providing a balanced training for the men who are to occupy the more responsible positions in future years.

The Universities of Maine and Syracuse, which have pulp and paper courses, have been able to provide their students with vacation employment in the mills, by which they get some practical experience. It is feared, however, that the mills do not appreciate the value of the opportunity to train these young men and in many instances little attention is paid to them.

Two years ago, when the textbooks were nearing completion, a Joint Committee, representing the two associations already mentioned, and also the American Pulp and Paper Mill Superintendents Association, was formed to study the subject of training and to develop a plan by which theoretical knowledge and practical training might be co-ordinated for the different classes of mills in the industry.

The first task of the Joint Committee will be to enlist the active support of the company executives in training the technical men along practical lines, and encouraging the practical men to study the theory of the processes in which they are engaged.

To Protect Riverside Trees

A bill has been introduced in the Quebec Legislature for the protection of trees by the side of salmon streams of the province. Provision is made for a zone of three chains on each side of each salmon stream within which no tree shall be cut, without a special permit from the Minister of Lands and Forests. This will apply only to Crown Lands, whether under lease or not. Therefore, privately owned lands will not be affected by the law.

Swedish Wood Pulp Journal's Anniversary Number

In commemoration of its fortieth anniversary, which falls this year, *Svensk Trävaru & Pappersmassetidning* (The Swedish Timber Trades and Wood Pulp Journal) has published a special number containing a wealth of information.

In addition to the usual contents, the Journal gives reviews of the different markets, both at home and abroad, for timber pit props, charcoal, tar, pulp and paper, and there is a full statistical section which provides information as to the export and import figures for various countries. The official Swedish export figures for timber and pulp for the year 1924, and the distribution of these exports over different countries, are included in this issue. The issue also contains a number of interesting articles on questions of the moment in the industries covered, including the following:

Some considerations as to the creation of a Swedish timber market in the Scandinavian countries.

Trade Prospects.

The return on capital within the Finnish timber industry.

A survey of the forest industries during 1924.

A document from the earliest days of the mechanical pulp industry in the light of modern ideas.

Conditions on the Australian paper market.

Determination of the exchanges and its effect on the economic result of the Swish paper industry for the year 1924.

Distillation and gas generating within the cellulose industry.

Further, the jubilee number contains short accounts of the three chief amalgamations, namely Svenska Trävaruexportföreningen, Svenska Cellulosaföreningen and Svenska Trämassaföreninten, together with photographs of the members of the boards of these associations.

The issue may be obtained from Svensk Trävaru & Pappersmassetidning Kunsgatan 17, Stockholm, Sweden.

Class in Paper Making at Cumberland Mills

W. V. Torrey is responsible for the following story in the *Pulp and Paper Magazine* of the Class in Paper Making at the plant of the S. D. Warren Company, Cumberland Mills, Me.:

"In the early part of 1921 about twenty men became interested in learning more about the paper business, so an organization known as the Paper Club was formed. Meetings were held weekly and talks on the technical part of the work were given by the superintendents of the departments. These talks were then followed by discussions. It was known at this time that a Course in Paper Making was soon to be started by the TAPPI. So it was decided that the Paper Club would study this course when the books were ready.

"Through the kindness of the Company, our Employment Agent, Edward L. Lincoln, a Harvard graduate, was retained as Instructor. We have held our meetings one evening a week for about eight months of the year since. Now we have completed the study of Volumes I, II, III, and IV, and expect to complete Volume V inside of the next two months. Mr. Lincoln has been assisted by the Department Heads, who have given talks on their particular lines.

"I might mention that our Chief Chemist, Mr. Edwin Sutermeister has given us a great deal of valuable help.

"Our method of conducting the class is a lecture by the instructor followed by general discussion. In the work on Mathematics and Mechanics, written work was done on the problems, which were usually those in the Examination Questions in the text.

"Following are the names of the men who have studied the entire course, and their occupations: Charles Dinsmore, clerk, Cashier Office; Harold Bragdon, accountant, Mech. Dept.; Charles Hodgkins, Mechanical Department; Lendall Goff, mechanic; Lloyd Leighton, beaters; Lendall Pillsbury, paper machine; Leon Lombard, paper machine; Selash Smith, beaters; Fred Spear, millwright; and Wilfred V. Torrey, chemist."

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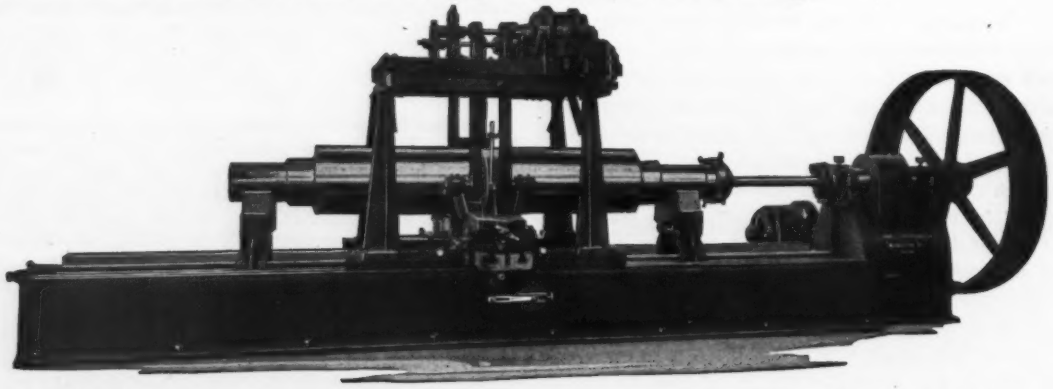

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Conducted by W.G. MacNAUGHTON, Secretary

Determination of Chemical Pulp and Groundwood in Paper*

DOCTOR HALSE.

The numerous methods of analysis of paper, both chemical and microscopical, are evidence of the necessity and interest of having accurate knowledge of the composition of paper.

Microscopic examination of the properly stained sample is always very useful and gives valuable indications as to the nature of the fibers. In many cases it can also be used for the quantitative determination of the proportions of the different fibers, though a high degree of accuracy cannot be expected.

In the case of ordinary news print, which consists of sulphite pulp and groundwood, the Herzberg stain gives such a sharp distinction between the two fibers that the amount of sulphite can be estimated under the microscope. Similarly, bleached sulphate and sulphite pulps can be readily distinguished and estimated by staining with magenta and malachite green, as indicated by Lofton and Merritt (U. S. Bureau of Standards, Technologic Paper No. 189).

Considerable Practice Required

But these methods require a considerable amount of practice and of experience, and are suitable especially in laboratories where such determinations are being carried out regularly and frequently. Under these conditions a fair degree of accuracy can be attained; but otherwise the methods are hardly to be recommended.

In the case of paper containing groundwood several colorimetric methods have been put forward, which are based on the fact that certain reagents, such as phloroglucinol, aniline sulphate, dimethylparaphenylenediamine (Würster's reagent), have the property of staining fibers containing lignin. The groundwood content of the paper is judged from the intensity of the color obtained when operating under certain definite conditions.

But these colorimetric methods fail when the paper contains too large a portion of groundwood, as in news print, for instance. Under these conditions the color is too deep to allow of judging the percentage of groundwood accurately. In this case better results are obtained by determining the quantity of reagent absorbed by a given quantity of paper as suggested by Cross and Bevan (Wood Pulp and Its Uses, p. 117).

It so happens that groundwood absorbs a definite amount of phloroglucinol. If a certain weight of paper is heated with an excess of phloroglucinol in hydrochloric acid solution it will be found that the absorption of reagent is proportinal to the groundwood content of the paper. The excess of phloroglucinol can be determined volumetrically by means of formaldehyde. Paranitraniline can be used instead of phloroglucinol, as it also is absorbed in definite proportions by groundwood.

The method, using either of the reagents mentioned, will give comparable results only when all the tests are run under strictly uniform experimental conditions; and it is the exception rather than the rule when concordant results are obtained by two different laboratories.

In the case of news print, which contains only sulphite an groundwood, a chemical analysis based on the determination of the percentage of lignin or of cellulose is to be preferred. There are a number of excellent methods available for this, the value of which is generally admitted. We shall try to choose the one which is best suited to the analysis of both sulphite and groundwood and which at the same time is simple enough to be used in an ordinary mill laboratory.

Willstätter's Method

Max Renker recently published a critical review of the methods proposed for the determination of cellulose (*Papier-Fabrikant* 1921, No. 21); while in the same journal (1924, No. 11) Heuser and Wenzl compared the different methods of determining lignin in sulphite pulp. Of course, these methods are not equally suitable in all cases. The one which seems to be the best in the case of news print is Willstätter's method, in which the cellulose is dissolved by means of concentrated hydrochloric acid, the lignin remaining as an insoluble residue.

The method has the drawback of necessitating the use of hydrochloric acid at a strength of 40 to 41 per cent, while the ordinary concentrated laboratory acid has a concentration of only 38 per cent. But the difficulty can be overcome by using a mixture of nine parts of 38 per cent hydrochloric acid and one part of concentrated sulphuric acid, as suggested by Tingle (*Industrial and Engineering Chemistry*, 1922, p. 41), instead of the 40 to 41 per cent hydrochloric acid alone. Wenzl (*Papier-Fabrikant* 1924, No. 11) suggests a mixture of hydrochloric acid and of phosphorus pentoxide. Both these modifications of the Willstätter method have been tried out with sulphite pulp and gave satisfactory results.

In our own laboratory we have used this method for quite a while for the analysis of news print. We dissolve the paper in the hydrochloric-sulphuric acid mixture; but when dealing with materials having a high lignin content, as groundwood, we have found it preferable to weigh the residue rather than to use Tingle's volumetric method.

*Translated from *Le Papier* xxvii, 1383-1386, December, 1924, by A. Papineau-Couture.

Method of Analysis

The method of analysis is as follows:

One gram of oven-dry paper is placed in a wide-neck, glass-stoppered bottle. Fifty cubic centimeters of concentrated hydrochloric acid (38 per cent HCl) is added, and when the paper has been completely wetted by the acid 5 cubic centimeters of concentrated sulphuric acid is carefully added. The battle is shaken several times during the first few hours, and is allowed to stand overnight at room temperature. The solution is diluted with water, transferred to a 750 cubic centimeter beaker, and made up to a volume of about 500 cubic centimeters. The solution is heated to boiling for a few minutes and allowed to stand until all the lignin has settled out. The greater portion of the supernatant liquid is decanted off, and the insoluble residue is filtered off on a porous crucible (Alundum R. A. 98), thoroughly washed with hot water, and dried at 100° C. to constant weight.

The proportion of groundwood can be obtained directly from the weight of lignin when the paper does not contain any filler. But if there is filler most of it will be found in the crucible along with the lignin. In that case the residue must be ignited, thereby burning off the lignin while the filler remains behind, and the weight of "pure" lignin is obtained by difference.

In order to deduce the groundwood content of the paper, it is necessary to analyze once and for all a certain number of samples of paper containing various known proportions of sulphite and of groundwood, determining the lignin on one gram of oven-dry paper. Here is an example of such a series of determinations:

Groundwood %	Sulphite %	Lignin found g.
0	100	0.030
30	70	0.101
40	60	0.125
50	50	0.145
60	40	0.166
70	30	0.188
80	20	0.215
90	10	0.240
100	0	0.266

If these results are plotted with the groundwood percentage as ordinates an dthe amount of lignin as abscissas, the resultant graph will be a practically straight line. The groundwood content of a sample of unknown composition is readily obtained by means of the graph from the amount of lignin found; or else it can be calculated by the formula

$$\text{Groundwood } \% = \frac{100(L - c)}{T - c} = \frac{100(L - 0.03)}{0.236}$$

in which L is the weight of "pure" lignin found in one gram of dry paper, T is the weight of "pure" lignin in one gram of dry groundwood = 0.266 gram, and c is the weight of "pure" lignin in one gram of dry sulphite = 0.030 gram.

The groundwood content having thus been found, the sum of the sulphite and the filler is obtained by difference. The percentage of filler is easily found by incineration, making due allowance for the combined water content in the case of China clay; and the percentage of sulphite is then obtained by subtracting the sum of groundwood and filler from 100.

Sources of Error

The method described above is relatively simple, can be carried out without any great experience, and does not require the use of complicated apparatus. It is therefore very well suited for use in a mill laboratory. But, in common with all other methods for the determination of groundwood and sulphite, it is subject to certain causes of errors because the lignin content of a given kind of pulp is not absolutely constant.

The lignin content of sulphite will vary according to cooking conditions: the proportion given above, 3 per cent, is the average of several determinations carried out on a number of strong news-grade sulphite. The lignin content of the groundwood is also a variable quantity, the main factor involved being the nature and quality of the wood. The figure 26.6 per cent which we used above is the average of a large number of analyses which gave fairly close results.

Another source of error is the variation in the moisture content of air dry groundwood and sulphite; but this error is quite negligible as compared with the error due to variations in the lignin content of the pulps. We also neglected to take into account the fact that sulphite and groundwood contain about half a per cent of ash.

But in spite of these shortcomings the method has been found very serviceable in practice. It gives results which agree quite well with those of other laboratories, and also with the mill records. And the use of such a method is all the more important since the United States have defined standard news print, which can enter free of duty, as containing not over 30 per cent of sulphite; for the usual methods can hardly be relied upon to give accurate results, especially when large sums are involved.

If the method which we have described contributes to make the results obtained in the quantitative analysis of paper more reliable, we shall be well repaid for our trouble.

Vocational Education at Nekoosa-Edwards Paper Co.

The following are industrial class notes of the Nekoosa-Edwards Paper Company appearing in the current issue of NEPCO Bulletin:—

Among the speakers already present at the Steam Class this year who have taken up special questions and problems relating to the study of steam are the following:

Wm. Classman of the Diedrich Arch Company who spoke on subject of arch construction.

Mr. Greenberg of the Bailey Meter Co., who took up the discussion of the Bailey Meter.

D. K. Freuch of the Dearborn Chemical Co., who treated the subject of scale and boiler water problems.

J. E. Clark of the Babcock & Wilcox Company, presented the topic of boiler and boiler settings.

Other topics which will be presented during the winter's course are:

Safety as pertaining to boiler room by Mr. Edgar, State Boiler Inspector.

Power plant management by J. C. White, State Power Plant Engineer.

This course is being conducted under the personal supervision of Prof. Benj. Elliott of the University of Madison.

Those men of the Power Department have certainly been unusually fortunate this year in having had the opportunity to hear such authorities on subjects pertaining to their work. We feel safe in saying that not many boiler plants have presented to their men the opportunity of having such an instructive course as those in our mills have had in their present course in Steam.

The Paper Class is at present studying the problem of drying paper by steam. Their course has included the study of making paper from the beaters to the winder. While there has not been any outside instructors in the Paper Class; under the discussion plan of holding classes the Paper Class has with the able help of C. E. Youngschild, Superintendent of the Nekoosa Paper Mill, and O. L. LeRoux, superintendent of the Port Edwards Paper Mill, had very interesting and helpful introspection into the difficulties of paper making. Both the steam and paper class will complete their work early in April.

Swedish Exports Decrease

WASHINGTON, D. C., April 15, 1925.—Swedish exports of paper and pulp during February were valued at $5,654,167 a decrease of $687,438 as compared with the previous month says Consul General Dawson at Stockholm in a report to the Paper Division of the Department of Commerce. There was no change in prices quoted on pulp and paper during the last two weeks in February.

Bleaching of Wood Pulp

IV.—Effect of Consistence on Bleaching of Sulphite Pulp (Low Density Study)

By C. E. Curran[1] and P. K. Baird[2]

The experiments reported in this paper have to do with the effect of consistence upon rate of bleaching and color of pulp when bleached. The data presented cover only the lower range of consistence, up to 7 per cent, together with temperatures ranging from 21° to 46°C. Higher consistences were impracticable because of the limitations of the apparatus. A study of higher consistences is contemplated at such time as a suitable apparatus can be provided.

Materials

An all-spruce sulphite pulp of the "semi-easy-bleaching" type, cooked by the direct steam process, was used. It was received in the form of machine-dried sheets (containing 7 per cent moisture), which were broken up to a cotton-like form in a Williams shredder.

TABLE 1—COMPOSITION OF BLEACH LIQUOR AS EXAMINED FROM TIME TO TIME DURING THE BLEACHING TESTS

Analysis No.	Date 1923	Total chlorine gms. per liter	Available chlorine gms. per liter	Chlorates gms. per liter	Chlorides gms. per liter	Alkalinity $Ca(OH)_2$ gms. per liter	Relative alkalinity
1	Aug. 15....	49.6	36.5	3.85	9.6	1.18	0.033
2	Aug. 28....	...	35.8	...	...	...	....
3	Sept. 12....	...	35.4	...	...	...	....
4	Sept. 14....	...	35.4	...	...	...	....
5	Sept. 28....	...	35.2	...	...	...	....
6	Oct. 19....	...	35.1	...	...	...	....
7	Nov. 9.... 1924	...	34.9	...	...	...	....
8	Feb. 5....	50.2	33.7	4.40	12.10	1.04	0.031
9	Mar. 17....	...	33.6	...	...	...	....
10	Apr. 9....	...	33.5	...	...	...	....
11	Apr. 30....	...	33.4	...	...	...	....
12	May 16....	...	32.9	...	...	...	....
13*	Oct. 27....	...	34.9	...	...	1.15	....
14	Nov. 12....	...	34.5	...	...	...	....
15	Nov. 25.... 1925	...	34.3	...	...	...	....
16	Jan. 5....	40.0	34.5	1.90	3.60	1.09	0.032

* New liquor.

The bleach liquor was made from commercial bleaching powder in the usual way, except that hydrated lime was added to insure a saturated solution of calcium hydroxide and a consequent high alkalinity during storage. The clear liquor was preserved in a container cooled by running water and siphoned off as used. The surface was covered with a layer of mineral oil to seal it from the carbon dioxide of the air. In this way a supply of bleach liquor of uniform chemical composition (see Table 1) was provided for the entire series of experiments. Until this method of preservation was adopted the maintenance of a liquor of constant composition for even a short time was virtually impossible, and an undesired variable was introduced.

Experimental Conditions

Bleaching experiments were performed at 1, 2, 3, 5, and 7 per cent consistences. Runs were made for each of the 3, 5, and 7 per cent consistence studies at four different temperatures—21°, 35°, 41° and 46°C. The runs for 1 and 2 per cent consistences were made at 21° and 46°C. only. All other known factors were held as nearly constant as possible. The apparatus used and technique developed have been described in a previous paper[3].

The bleach liquor contained the equivalent of 10 per cent standard bleaching powder (35 grams of available chlorine per liter) and an alkalinity of 1.8 grams of calcium hydroxide per liter. The quantity of liquor used in each run supplied an equivalent of 12.3 per cent of standard powder, based upon the oven-dry weight of the pulp, which had been found by test to be its bleach requirement for an average white color.

The bleaching apparatus was revolved at a uniform speed of 5.66 r.p.m. This speed was found insufficient to bring about an adequate mixing in the early stages of the 7 per cent consistence study, and one run was made at 7.96 r.p.m. in an effort to meet the difficulty. The new factor thus introduced will require additional study, however, before the data can be definitely interpreted.

Procedure

The pulp, diluted to give the desired consistence when bleach liquor was added, was brought in contact with the bleach liquor in the apparatus under conditions permitting accurate control of the temperature and rapid mixing of the reacting materials.[3] Samples, withdrawn at intervals for determination of the rate of bleach consumption and color, were taken with greater frequency at the beginning of the bleaches on account of the high initial speed of the reaction. The end of the bleach was considered as reached when 30 seconds were required to develop a blue spot on the pulp with starch-iodide solution.

The rate of bleach consumption was followed by analyzing the residual liquor, pressed from the samples withdrawn, for available chlorine.

TABLE 2—BLEACHING DATA

Run No.	Consistence. Per cent	Temperature. °C	Total time. Minutes	Bleach liquor analysis No.	Hess-Ives final color (a) Red	Green	Violet
83.....	1	46	225	14	91	88	81
84.....	1	46	255	14	92	90	82
Average.....	1	46	240	..	91.5	89	81.5
89.....	1	21	1,980	15	91	88	80
90.....	1	21	1,980	16	92	89	81
Average.....	1	21	1,980	..	91.5	88.5	80.5
85.....	2	46	180	14	92	89	80
86.....	2	46	170	14	92	88	80
Average.....	2	46	175	..	92	88.5	80
87.....	2	21	1,260	15	93	89	80
88.....	2	21	1,265	15	93	89	81
Average.....	2	21	1,262	..	93	89	80.5
77.....	3	21	1,020	12	93	89	80
71.....	3	35	335	11	92	87	78
76.....	3	35	335	11	92	87	80
Average.....	3	35	335	..	92	87	79
72.....	3	41	200	11	90	84	77
78.....	3	41	220	12	92	89	81
Average.....	3	41	210	..	91	86.5	79
73.....	3	46	140	11	92	87	79
74.....	3	46	140	11	92	88	80
Average.....	3	46	140	..	92	87.5	79.5
54.....	5	21	720	3	90	88	82
55.....	5	21	705	4	91	88	81
Average.....	5	21	712	..	90.5	88	81.5
52.....	5	35	220	3	91	89	81
53.....	5	35	220	2	91	89	82
82.....	5	35	240	13	91	89	80
Average.....	5	35	227	..	91	89	81
50.....	5	41	120	1	...	...	...
51.....	5	41	135	2	91	87	81
58.....	5	41	130	6	90	89	80
Average.....	5	41	128	..	90.5	88	80.5
56.....	5	46	80	5	...	...	...
57.....	5	46	85	5	91	88	82
59.....	5	46	85	6	91	85	80
Average.....	5	46	83	..	91	86.5	81
66.....	7	21	510	10	91	86	77
67.....	7	21	510	10	91	86	79
Average.....	7	21	510	..	91	86	78
68.....	7	35	200	10	92	87	79
69.....	7	41	105	10	92	88	80
70.....	7	46	70	11	92	86	78
75.....	7	46	80	11	92	89	81
Average.....	7	46	75	..	92	87.5	79.5
79(b).....	7	21	410	13	...	...	...

(a) Color of unbleached pulp: Red = 77.6; green = 67.6; violet = 61.2.
(b) Special run at 7.96 r.p.m.

[1] Chemist in Forest Products, Forest Service, Forest Products Laboratory, Madison, Wis.
[2] Chemist in Forest Products, Forest Service, Forest Products Laboratory, Madison, Wis.
[3] C. E. Curran and P. K. Baird. Bleaching of wood pulp. I. Factors affecting the process and their control. Paper Trade Journal, Vol. 79, No. 1, pp. 56-8 (July 3, 1924).

The effect of consistence upon color was studied by observing the progress of the whitening, or color change of the pulp, as well as by the measure of the final color. Hand sheets were prepared and color determinations made by means of a Hess-Ives tint photometer[4]. While measurements with this instrument are only comparative, the results are well suited to the requirements of the experiment. By averaging several readings color values accurate to about one per cent were obtained.

Discussion of Results

The experimental data are shown in Table 2. The primary objective in bleaching is to whiten the pulp. Unless this end is achieved, all other considerations are of secondary importance. The fact that the final color or "whiteness" of all bleaches made in the course of this work was practically the same, regardless of variations of either consistence or temperature, is considered of outstanding importance. Apparently these factors can be varied at will and selected to suit any given set of mill or laboratory conditions without affecting the final color quality of the bleached pulp. The progress of the color change or the "brightening" effect is, however, quite irregular. No relation has been discovered between

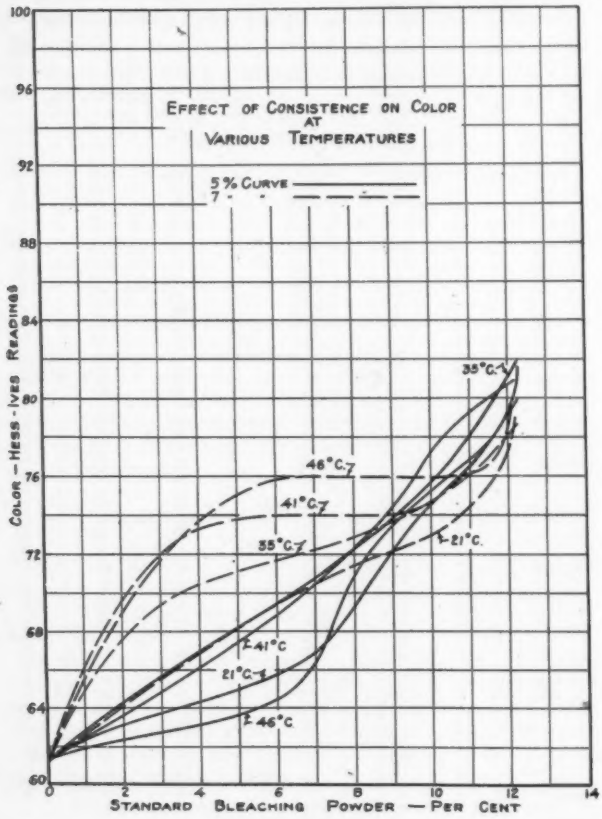

FIG. 1

FIG. 1

the character and rate of color change and the bleach consumption, although some such relation doubtless exists. Color readings made upon samples withdrawn from duplicate bleach runs at points of approximately equal bleach consumption often showed wide variations. When the color values are plotted against bleach consumption the curves take divergent paths, although the end point is always practically the same. For any given consistence there seems some degree of similarity, but not enough to justify any generalizations at this time.

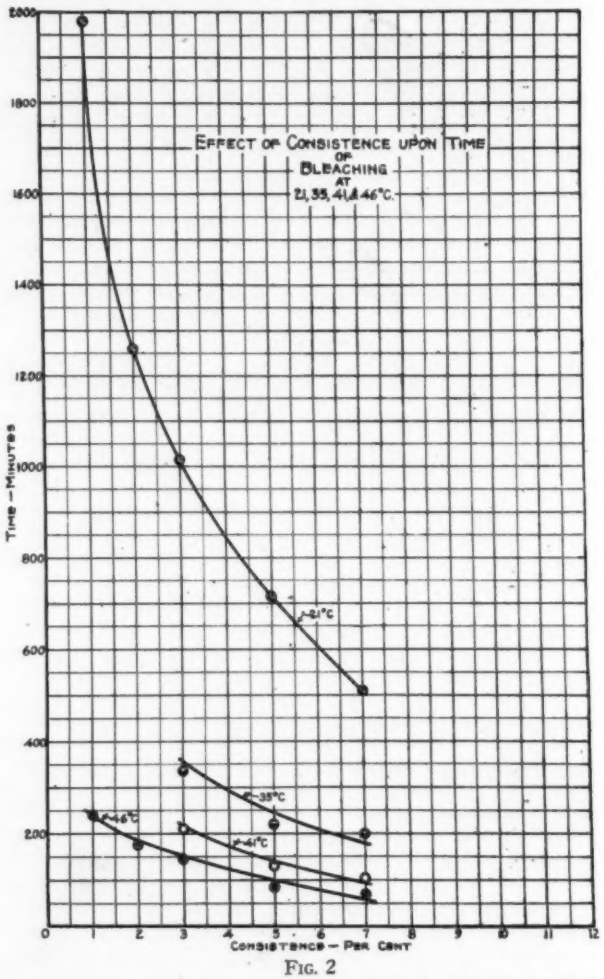

FIG. 2

A typical case is shown in Fig. 1. Here, the "parts white"[4] of the 5 and 7 per cent consistence runs are plotted against bleach consumption. The most obvious explanation of the apparently erratic progress of the color change is the variation in mixing which occurs, in spite of every effort at control, in the early stages of the reaction. The consequent over or under-bleaching of portions of the pulp influences the entire color phase of the bleaching excepting the final color, and might, under less favorable circumstances, even influence that. There may, however, be other disturbing factors as yet unaccounted for.

The limited range covered by these data must be emphasized. The highest consistence used (7 per cent) was lower than is now common practice in many mills. The results cannot be assumed to apply to higher ranges of consistence until substantiated by further studies.

The general effect of increasing consistence is to decrease the time of bleaching. This fact is shown graphically in Fig. 2. At first glance it is seen that there is a very marked decrease in total time, particularly at the lower temperatures. However, the time reduction was found to decrease in approximately the same pro-

[4] In compiling the tint photometer data, the following conventions have been adopted: The primary colors, red, green and violet, are measured in percentages as read directly from the instrument. The lowest of the three readings is assumed to represent the "parts white" in the sheet, on the assumption that equal proportions of the three primary colors present produce white. Luminosity, or amount of light reflected, is obtained by multiplying the observed readings for red, green and violet by their respective "light intensity factors," 0.19, 0.71 and 0.10.

portion for all temperatures used and would probably continue decreasing in this wise as the consistence was further increased—although the validity of the latter inference remains to be proved. From a practical standpoint it would seem that the degree of stock density beyond which the difference in bleaching time would be inconsequential would be reached at a relatively low consistence irrespective of temperature, assuming other factors to remain the same. Since it is apparently true that the final color need give no anxiety, the time factor could be controlled by taking advantage either of temperature or of density as the conditions in the mill permitted. Under circumstances where only a low consistence could be conveniently employed, the bleaching time could be reduced by use of high bleaching temperatures, disregarding, of course, the possible effect of high temperatures upon the strength of the pulp. Under conditions where space is restricted, the time could be saved by increase in consistence as well as temperature, but at an increased cost for power, steam and special equipment.

The effect of mixing upon the rate of bleach consumption was brought out in a striking manner in connection with this work. In the previous paper[5] it was pointed out that the bleach consumption appeared, when plotted, as a linear function of the logarithm of the time. In this work the same relation was found to hold for all densities up to 7 per cent, at which point the graph was no longer a straight line in the initial stages of the reaction. It was found, however, that when the mixing rate was increased from 5.66 to 7.96 r.p.m. (the latter being the highest possible with the apparatus used) the curve approached close to the position predicted. A slightly greater degree of mixing would doubtless cause it to take the place originally anticipated.

Summary

In a study of the effect of consistence upon the bleaching of "easy-bleaching" sulphite pulp at low consistences it has been shown that:

(1) The final color is practically independent of either consistence or temperature within the range studied.

(2) The rate of bleach consumption is increased as the consistence increases, the actual time differential being greater at lower temperatures.

[5] C. E. Curran and P. K. Baird, Bleaching of Wood Pulp. III. Effect of Temperature on the Bleaching of Sulphite Pulp. PAPER TRADE JOURNAL, Vol. 79, No. 11, pp. 45-7 (Sept. 11, 1924).

The Dyeing of Paper

An extremely artistic and well presented treatise for the student interested in coloring paper, as well as a handbook for the color man in the paper mill, has just been published by E. I. du Pont de Nemours & Co., Wilmington, Del.

The book is written by John R. Roberts, in charge of the Paper Dyestuffs Department, who has had unusually broad experience in the use of dyestuffs for paper, having been for many years in charge of the beater room of Nekoosa-Edwards Paper Company at Nekoosa, Wis., before entering the du Pont organization.

The book has over 100 pages and contains nearly 75 samples of paper to illustrate the color formulas described.

Rates Found Unreasonable

WASHINGTON, D. C., April 15, 1925.—The Interstate Commerce Commission has handed down a decision in Docket 14,358 of the West Virginia Pulp and Paper Company against the Southern Railway. In their syllabus in this case the Commissioners say:

"Interstate rates on pulpwood in carloads, from points in Virginia, North Carolina, South Carolina, Tennessee and Georgia, to Covington, Virginia, found unreasonable and unduly prejudicial to complainant and unduly preferential of wood pulp and paper manufacturers at Coleman, Big Island and Hopewell, Virginia, Canton, N. C., Kingsport, Tenn., and Bristol, Vir.-Tenn. Reasonable and non-preferential and non-prejudicial rates prescribed for the future."

British Technical Section Proceedings

The second part of the fifth volume of the Proceedings of the Technical Section of Great Britain (Mar. 1925) has just come to hand and contains a number of valuable papers with discussion on them at the different divisional meetings held afterwards.

Those of special interest to members of TAPPI are:—Paper Testing by A. G. Rendall Paper Drying by Major R. Marx, Machine House Ventilation by A. I. MacNaughton, Resinous Content of Chemical Pulps by J. H. Mowatt.

In Mr. Rendall's paper a test new to this country is given; that of the relative humidity of the paper. By this is meant the relative humidity of an atmosphere in which the paper will be at equilibrium for its moisture content that is, in which it will neither give up or take moisture from the air.

CAUSE OF WAVY EDGES—"Whether a ream of paper lies flat or whether it developes waved edges or a raised hump in the middle, is mainly a matter of relative humidity. If the paper is at a lower humidity than the average of the air in which it is kept, the edges will absorb moisture, stretch and become waved. This is the general case because paper is usually finished with a humidity below 60 per cent, often as low as 23 per cent, and is kept in air for which the average in this country is between 65 per cent and 70 per cent.

"If the paper maker could arrange to send out all his paper at between 65 per cent and 70 per cent relative humidity, the bugbear of the cockled edges and bad lying paper would be largely eliminated."

TEST FOR PRINTING PAPERS—In discussing the tests for determining the printing qualities of paper he says: "With printing papers, the grease penetration factor is of importance. If it is too low, that is if the paper absorbs the greasy ink too readily, the printing matter will either strike through to the other side of the sheet, or the vehicle of the ink will penetrate the sheet leaving the pigment high and dry on the surface as an easily removable powder. Conversely, if it is too high, the ink will be slow drying and easily removed or will offset."

PAPER DRYING AND VENTILATION—Both the papers by Major Marx and A. I. MacNaughton present the subjects discussed many times at our meetings from very different viewpoints from ours although they refer to the work of several of our members. Those especially who are interested in these two subjects should get a copy of this volume for study.

RESINOUS CONTENT OF CHEMICAL PULP—Those inquiring about pitch troubles should read the paper by J. H. Mowatt which gives a great deal of data on the Ash and Resin Content of sulphates and discusses the probable reasons for the variable quantity present.

Published by the Papermakers Association of Great Britain and Ireland, A. W. Foster, Secretary—26 Farrington Street, E. C. 4 London, Eng.

Awaiting Additional Data on Fiber Analysis

WASHINGTON, D. C., April 8, 1925.—The completion of a report regarding the results of fiber analysis by cooperating laboratories, of news print fiber mixtures of known composition is awaiting additional data requested by those cooperating in this work says the Paper Section of the Bureau of Standards. The data obtained indicate that errors of from 5 to 10 per cent are common and that by the usual methods of test, either estimation or count accuracy greater than plus and minus ten per cent cannot be assured.

Daring Mfg. Co. Starts Paper Mill

BRIDGEPORT, Pa., April 6, 1925.—Work has been started here by the Daring Paper Manufacturing Company, formerly the Amboy Paper Company. C. S. Daring is the president. The plant had been closed for over a month, during the change of ownership.

The new company has put about 40 men to work. Bristol board is a product. Chocolate layer boards and other paper compositions will also be manufactured.

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The Glarimeter and the Measurement of the Finish of Paper

By R. E. Lofton*

The term "finish" as applied to paper has reference to the character of the surface of the paper—to its smoothness, or freedom from irregularities. A paper having a "high finish" has been subjected to a finishing process, the purpose of which is to smooth or iron out the surface irregularities common to all papers having come directly from the papermaking machine. The degree of finish given to the paper becomes evident as gloss when the sheet of paper is held before the eyes and toward the light at the proper angle.

The Glarimeter is an instrument designed to measure the gloss from the surface of paper, and of other nonmetallic surfaces. It does not give an absolute measure of the gloss, but only the ratio of the amount of light reflected as gloss to the total amount reflected.

It is necessary for this discussion to distinguish three types of reflection: (1) diffuse or scattered reflection; and (2) specular or regular (not scattered) reflection; and (3) a combination of (1) and (2). All reflection from the surface of the paper belongs to type three. A matt-surfaced paper, such as blotting, reflects nearly all the light diffusely, and very little regularly; a highly finished or glossy-surfaced paper reflects nearly all the light regularly, and very little diffusely.

It has been found by experiment that light regularly reflected from the surface of a sheet of paper at an angle of 57½ degrees is almost completely plane-polarized, that is, it travels in one plane only instead of in all planes as it formerly did. In order to determine the amount of gloss, therefore, it is only necessary to determine the amount of light polarized at this angle. This is done by allowing a beam of light to fall at an angle of 57½ degrees onto the sheet of paper so that it will be reflected into a photometer or polarimeter at the same angle. This is the principle upon which the Ingersoll Glarimeter is constructed.

The gloss determinations are made by matching the two half-fields of view in the photometer for light intensity and noting the resulting scale setting in degrees. If it is desired to express the result as per cent gloss, the gloss in degrees may be converted into per cent gloss by the following formula:

Per cent of gloss = Cos 2 (60° — scale setting).

An investigation to determine the accuracy of 5 Ingersoll Glarimeters has recently been made. The idea in making the study was to determine whether each of the instruments would check the others, and whether different observers would check one another, in measuring the gloss of paper.

Two of the instruments used were of the original wood box type, and three were of the all-metal type now being supplied to the trade. Three samples of paper were tested: (1) A white blotter, (2) a medium finish book, and (3) a high finish coated book. Five observations were made on each sample by each of three individuals on each instrument.

The results of the observation were very satisfactory. Two new all-metal instruments gave almost identical results when the averages of the three observers were considered. The averages for the high-finish book, as determined with these two instruments, were 43.2 degrees (83.0 per cent) gloss for each instrument; for the medium finish book, 27.7 degrees (42.5 per cent) gloss for each instrument; and for low finish, 18.3 degrees and 18.4 degrees (11.7 per cent and .120 per cent respectively) gloss.

The third all-metal instrument gave lower values than the two instruments just referred to, the maximum difference being 1.3 degrees low for the low-finish paper. It was subsequently found that the low values given by this Glarimeter were caused by a slightly improper adjustment of the photometer.

The wooden box type Glarimeters did not check very well with the two all-metal instruments, nor with each other. One gave an average difference of 1.6 degrees low from the averages of the two metal testers on the high-finished paper; on the other two papers it checked the metal instruments within one-fourth (¼) degree. The second box-type Glarimeter gave average values about 1¼ degrees below the averages of those given by the two all-metal instruments. This tester was subsequently examined and found to be incorrectly set for the 60 degree point by about this amount.

The agreement of the three observers was good. The averages of each set of five observations by each observer taken with the three instruments in good adjustment differed by less than a degree in every case, and the averages of the differences between maxima and minima were less than 0.2 degree in each case. The observations from the two instruments found to be out of adjustment did not check so well, the average of the differences between the maximum and minimum for all observers being, in one case, about ¼ degree, and in the other, a little more than ½ degree.

The old box type instrument cannot be recommended, since it may possibly get out of adjustment due to warping or shifting of the pieces of wood of which the box is constructed. It is also faulty in that angle of the incident and reflected light is changed somewhat when samples of considerable thickness are placed in the instrument. The new type of Ingersoll Glarimeter is properly constructed and entirely satisfactory results in the determination of the finish of paper can be obtained by different operators with different instruments.

* Assistant Physicist, Bureau of Standards.

TECHNICAL SECTION, PAGE 150

New Plibrico Catalogue

The new catalogue of the Plibrico Jointless Firebrick Company, 1130-50 Clay street, Chicago, is an unusually attractive work. The new Plibrico catalogue has 36 pages. It is standard filing size—8½ x 11.

A large section is devoted to the proper installation of monolithic furnace linings. This section, step by step, tells how monolithic linings should be installed. If the instructions are followed, long life is assured.

Another section gives the reasons for the superiority of this type of furnace lining over other and less modern types.

Sections describe the use of this lining for furnace fronts, arches, side walls, and bridge walls in boiler furnaces and for heating furnaces, baking ovens, stills and other industrial furnace and miscellaneous applications. There is an interesting section on lining furnaces under oil burning boilers.

A free copy of this catalogue will be sent to anyone interested in getting longer furnace wall life, in cutting loss of heat through settings, and in decreasing installation cost.

Rag Shortage Causes Higher Prices

WASHINGTON, D. C., April 15, 1925.—The rising prices of raw materials in Italy has been reflected in an upward trend in paper prices according to a report received from the Commercial Attache at Rome by the Paper Division of the Department of Commerce.

Production costs tend to increase not only as a result of the greater outlay necessary for raw materials of all kinds, but also due to increase in wages which were advanced 5 to 9 per cent during January, the report states. The latter month is reported to have witnessed a more active and steady flow of orders to the Paper mills, but purchasers are still reluctant to buy in large quantities and are only covering their immediate needs, a weakness which is attributed to the keen competition of foreign papers on the Italian market. The report states that much complaint is heard of the high prices and shortage of rags.

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Modern Tendencies in Accounting Practice*

By J. O. McKinsey, C. P. A.

To comprehend clearly the present trends in accounting practice it is necessary to understand the past developments in accounting and to see how the accounting profession has reached its present position of influence. The present trends are largely the result of influences which had their origin many years ago. These trends are influenced to a considerable extent by the conditions under which the profession of accounting was first established. I shall ask you, therefore, to bear with me while I sketch very briefly the development of public and private accounting practice during the past half century. Much of what I shall say is already familiar to you, but I think it worth while to remind you of certain significant facts which it is desirable for you to have in mind that you may better understand what I wish to emphasize in the latter part of this discussion.

There is much mystery concerning the historical development of accounting. Although some form of records have been kept by business men since primitive times, it is fairly clear that modern accounting had its origin in England. At least it was there that public accounting first developed into a profession. There is some historical evidence to the effect that the first auditors were representatives of the government who listened to reports of government officers concerning the operations of these officers during past fiscal periods and gave approval if they thought the reports correct. Gradually these auditors began to examine the records of those who were reporting to them to see that those records agreed with the reports. It was thus that the term "auditor" came to be applied to those who have now become primarily inspectors of accounts.

Practice of First Public Auditors

Later private auditors commenced to investigate the records and report on the financial condition of private concerns. We do not know the details of how this development came about, but we do know that the practice of the first public auditors was confined largely to the investigation of bankrupt companies for the benefit of creditors and court. Gradually the public auditors or accountants, as they came to be called, began to investigate companies for the benefit of prospective investors, creditors and government agencies. We are not interested here in the details of this development but it is important for us to see that the primary objective of the public accountant in the early days of the profession was to prepare accurate reports concerning the financial condition of the business for the use of those who were external to the management of the business.

Although we have little information concerning the development of private accounting during this period, except that which we can obtain from the literature written at this time, it is fair to assume that it was influenced very largely by the work of the public accountants. More and more the records of companies were developed so they would provide the information desired by the public auditors. Thus we see that both the public and the private accountants in the early days of the profession in England were interested primarily in the construction of records and the preparation of reports which would provide information for the use of those who were not primarily interested in the administration of the business.

Public-accounting practice had its origin in the United States about 1880. It did not have a very rapid development until after 1895. Its real growth came after 1896 during the period when large corporations were being developed and constant appeals were being made to investors and creditors for funds to operate these corporations and to provide funds for their continuous expansion.

Both commercial and investment bankers urged with increasing insistence that they must be supplied with competent information before they would supply funds for financing business organizations. All are familiar with the work of the American Bankers' Association and the National Association of Credit Men. It is instructive to note that these two organizations did not interest themselves intensively in this subject until after 1895.

Increased Demand for Public Accountants

This attitude of investors and credit associations led to an increased demand for the services of the public accountant. The public accountant got his second lease on life after the passage of the income-tax law of 1913. He received an additional boom after the passage of the excess-profits and the war-profits tax laws. Although the public accountant in the United States since the early days of the profession has rendered a multiplicity of services to business men, it is clear that the profession owes its growth largely to the demand for information by those external to the business.

The growth of private accounting in the United States has paralleled the growth of the public-accounting profession. A quarter of a century ago most firms had a bookkeeping department which was under the supervision of the treasurer or secretary of the company. Gradually the bookkeeper has developed into a chief accountant or general auditor and in many cases he has won his independence from the secretary and treasurer and has been given the right to report directly to the president or general manager.

* Journal of Accountancy.

During the past ten years the chief accountant or general auditor has, with increasing frequency, developed into a controller who has become one of the chief executives of the organization. While the bookkeeper of a quarter of a century ago confined himself largely to the compilation of financial data to be used in the collection and payment of debts and the preparation of simple statements of profit and loss and balance-sheet for the use of investors and creditors, the controller has become an investigator, advisor and guide of the operations of this company.

For many years private accounting practice lagged behind the development of public practice but in the past ten years the private accountant has in many cases gone beyond the public practitioner in the variety of work he performs and the importance of his duties and obligations. As indicated above the controller now performs a multiplicity of duties in the large organization. It is impossible to state definitely what the duties of a controller should be. It is my opinion that typically he should have jurisdiction over accounting, budgeting, statistics, methods and standards and organization problems. In some corporations the controller has a separate division in his office responsible for the administration of each of the foregoing groups of activities.

Expanding Activities

The development of the controller function is gradually having an effect upon the work of the public accountant. He is more and more being called upon to expand his activities and to give advice and counsel to his client on all the matters over which the controller has jurisdiction. At one time the public accountant thought his duty was fulfilled when he presented to his client an accurate balance-sheet and statement of income and expense accompanied by his certificate. The performance of this task is still an important function of the public accountant and will always remain so, but the accountant has found during recent years that his clients value his services most when he can interpret these statements to them and offer suggestions concerning the action which these statements indicate should be taken. The client is no longer satisfied to receive the figures alone. Just as he expects his controller to interpret to him the data he presents periodically, he expects the public accountant to interpret the data he presents and to offer suggestions and advice based upon the broad experience which the public accountant gets by investigating the operations of many different organizations. The public accountant frequently finds that he is asked for advice by the controller concerning the activities over which the controller has jurisdiction. It is natural, as the controller has become interested in establishing a statistical department or in working budgets for an organization, that he should ask the public accountant concerning the experience of other concerns with these administrative devices. So the public accountant has been forced to take an increasing interest in management matters and to broaden the scope of his activities.

Income Tax Matters

This tendency has been facilitated by the work the public accountant has done with reference to income-tax matters. When the public accountant was primarily an auditor he frequently did not have very intimate or close contact with the major executives of the organization he served, but when he commenced to give advice to his clients concerning income-tax problems he was dealing with matters which were vital to all of the officers and executives of the company. Consequently he was led into conferences and intimate contact with officers and executives. They soon learned to value his advice and to know that he was able to give them many valuable suggestions based on his broad professional experience. It was natural, therefore, for the executives to commence to consult with the professional accountant concerning other than strictly accounting matters. The public accountant, therefore, has become more and more a counselor and advisor to his client.

Another factor which has influenced the work of the accountant is the increasing tendency of investment bankers to request from those who are offering stocks and bonds for sale more comprehensive information than that which is provided by the auditor's report. These bankers have learned that the management of the company is as important a factor as is its financial condition. They endeavor, therefore, to obtain information concerning the policies, organization and management methods of their prospective clients. Since the public accountant has long been presenting to them auditors' reports and discussing with them the financial condition of their clients, it is natural that they turn to him to provide this information. Consequently the public accountant has commenced to broaden his investigation of companies which are seeking additional capital and this has led him into many lines of activity which would have been thought quite foreign to the work of the public accountant a quarter of a century ago.

We can see, therefore, two distinct tendencies in accounting practice: first, the development of private accounting practice to the point where there is a controller who has jurisdiction over a wide range of activities in addition to those of a strictly accounting nature; second, the development of the work of the public accountant so that he assumes responsibility for advising his client concerning those activities over which the controller may rightly exercise jurisdiction.

Fields Into Which He Should Not Go

I wish to emphasize this relationship between the work of the public practitioner and the work of the modern controller because there has been some tendency during the past few years for the public accountant to expand his activities into fields into which in my judgment he should not properly go. We are all familiar with the unknown accountant who over-night has blossomed out as a well-known industrial engineer. Many such were able during the prosperous years following the war to make incomes which were far beyond their highest dreams in the days when they were only accountants. Some of these have held themselves out as willing to give advice, and counsel on all matters relating to the administration of any department of a business. I think that we are all willing to admit that no one can be an expert in all fields of business activity. The professional lives of all of us are too short for us to become competent to advise our clients on all matters. Although I think we should recognize that the work of the public accountant should not be restricted to that of the former auditor, it is proper and wise that we recognize limits for our professional activities. I suggest as a probable solution of this problem that as practitioners we may properly advise and counsel our clients on any matter which may properly come within the jurisdiction of the controller. This means that we may offer our services to our clients in accounting, statistical, budgetary and organization problems. I think we must admit that this offers us a field that is sufficiently broad to be a challenge to the thinking of all of us. The problems which arise in the establishment and use of budgets alone are sufficiently varied and complex to tax the abilities of the most capable members of the profession.

Other Significant Tendencies

Although the most important trend in accounting from my point of view is the broadening scope of the activity of the accountant, which has been outlined, there are other tendencies which are significant. Among the most important of these is the increasing tendency towards the establishment of small accounting firms composed of a few partners, who limit their activities to one locality. I have been particularly interested in noticing, during the past few years, the number of young men who have commenced to practice on their own account after serving a reasonable apprenticeship with some established firm. There are hundreds of accounting firms, of which we rarely hear, which are doing creditable and useful work. There is scarcely a week that I do not hear of some firm in my home city concerning which I had not

previously known. This tendency is also shown by the extent to which young men are beginning to practice in small cities. There is scarcely any city of reasonable size in which you will not find one or more public practitioners. This tendency will increase the intimate relationship between the accountant and his client which, we have already seen, has been encouraged by the broadening scope of the accountant's duties. In a large accounting organization it is impossible for the partners in the firm to have intimate contact with all their clients. In many cases the work of a client must be left to staff men. Although these men may be very capable they cannot represent their firm in the same way in which the partner does. In the smaller firm the partners usually have direct supervision of all engagements and this brings them in intimate contact with their clients. This encourages the client to consult the accountant concerning many of his important problems.

It is recognized, of course, that there is now and will always be need for some large accounting firms with widely distributed branches which will serve the needs of those large corporations which have widely distributed units of organization. It is not intended that anything said in this discussion shall in any way cast reflection upon the excellent work done by some of these organizations. It is only desired to recognize that the trend of the future will be toward the establishment of the local firm rather than the establishment of additional numbers of these large organizations.

The present tendency also brings about the practice of employing the accountant on a retainer basis. This plan has long been followed in the legal profession and has promoted an intimate contact between the lawyer and his client. I think that this relationship offers much promise for the public accountant. If he is retained by his client on a yearly basis and studies his client's problems month by month, he soon becomes intimately acquainted with the operations and problems of his client on a yearly basis and studies his client's problems of his client's organization and, therefore, offers more valuable advice and counsel than if he comes in contact with the organization once a year. The client by this plan is able to obtain the advice of a man who knows his business intimately and who can also bring to him the experience he has gained by contact with many other organizations. It can be easily seen that the professional accountant can give to his client in this manner a service the client cannot possibly obtain from his controller whose experience is usually limited to one organization. I prophesy that the time is not far distant when accountants both public and private will be members of boards of directors in the same manner in which lawyers are now employed in this capacity. This will naturally raise the question whether an accountant holding the position of a director can properly audit the company which he thus serves. I think there is doubt of the advisability of his doing so.

Change in Relationship

The change in the relationship between the client and the professional accountant gives rise to a problem of considerable significance concerning the basis of compensation for the accountant's service. It seems long to have been the practice of members of the accounting profession to charge for their services on a per diem basis. When the accountant was performing primarily an auditing service this was a satisfactory basis. He depended for his returns largely on the profits he made on the services of those he employed on his staff. When the accountant offers his own services to his client as a counselor and limits the number of staff men he employs, it becomes increasingly difficult for him to fix his compensation on a per-diem basis. There becomes an increasing need for him to base his compensation on the value of the service rendered rather than on the amount of time spent in rendering the service. It is not difficult to see that the professional man acting as a counselor to his client can offer advice which may be very valuable indeed and for which he may properly charge an amount which would seem unreasonable on a per-diem basis. I believe that there is an increasing tendency and an increasing need for the professional accountant to break away from the per-diem basis of charging for his services. I think this will have two beneficial results: First, it will enable the accountant to secure proper compensation for his services without the necessity of building up a large organization or establishing a number of branches. Second, it will enable the accountant to base his compensation on the value of the service rendered and to some extent on the ability of the client to pay. It has long been the practice of other professional men to consider the ability of their clients in determining the amount of their compensation. I think the accountant is justified in doing the same thing. If he follows this plan it will enable the well trained accountant to give competent advice to many small organizations which are not able to pay him an amount equivalent to what he may properly charge the large organization. The physician and lawyer often render service to the one in need who can not compensate them in proportion to their ability. It seems very much to be regretted that the professional accountant cannot to some extent take the same attitude. It seems regrettable that a small organization can not obtain professional advice except from young and untrained or the incompetent professional man. This plan will also enable the professional accountant to render public service more freely than he feels able to do in many cases at present.

I am not arguing here for the contingent fee or that the accountant should regard his work primarily from the monetary point of view. I do believe, however, if we hold ourselves out as competent to give advice to business executives as to how they may increase their profits, that we should show that we are competent to administer our own affairs so that we can obtain reasonable compensation for our own services and that it is not unbecoming in a professional man to try to make his income as large as is consistent with the service rendered and the ideals and ethics of the profession of which he is a member.

Emphasizes an Educational Training

Another trend in accounting practice which is exceedingly interesting is the increasing emphasis on the educational training of those who enter the profession. I think it is unfortunate that in the early days of the development of public-accounting practice it was regarded as necessary for the future practitioner to receive all his training by the apprenticeship method. The accounting profession has not established as high educational standards for admission of candidates for the certificate of certified public accountant as the other well known professions have established for admission to practice. I think the time will come when we shall require of every candidate for the C. P. A., certificate not only a certain amount of educational training in academic subjects but also a certain amount of formal training in accounting and related matters. The increasing interest of professional firms in graduates of collegiate schools of business and the increasing interest of some of the state societies and of the American Institute of Accountants in the development of accounting education indicate that the trend towards the ideal situation which I have suggested is very definite.

Finally, there is a distinct tendency for the accounting profession to practice the rules of ethics and to follow the customs of good fellowship and fair dealing which are characteristic of a dignified profession. More and more accountants are ceasing to advertise their wares, solicit clients, seek the business of competitors and do the other questionable acts concerning which there has been so much discussion in the past. The leaders of the profession are adopting as their motto, "In case of doubt, don't." More and more those who are established in the profession are lending a helping hand to the struggling beginner. It has long been a cherished tradition of the legal profession that the successful practitioner will open his library, his files, and even his store of knowledge and experience to the attorney just entering the profession. May we

not hope that a similar tradition may soon characterize our profession also? The way of the beginner in a profession is difficult at the best. If we lend him a helping hand we assist to eliminate the temptation for him to seek clients by doubtful means. So working together we can increase the respect and confidence of the business man in our profession which will result in larger returns to all of us both financially and professionally.

Trends in Accounting Practice

To summarize, I have tried to indicate the following trends in accounting practice:

First, the broadening of the scope of the duties of the private accountant to embrace the activities which are now typically placed under the controller, who should be one of the five or six major executives in the typical organization and should control a homogeneous group of activities involving the collection and presentation of accounting and statistical data concerning past operations and offering advice and counsel concerning the future plans and policies to be based on this information and also offering advice concerning the organization and procedures through which these plans and policies are to be made effective.

Second, the development of the work of the public accountant to include all those activities which may rightly be placed under the jurisdiction of the controller. This of necessity leads to the accountant's becoming more and more a counselor and advisor.

Third, the trend toward the establishing of smaller units for the practice of public accounting and the limiting of the work of the public accountant to his local community in the same way in which the work of the physician and lawyer is limited.

Fourth, the tendency toward the employment of the accountant on a retainer basis where he renders continuous service to his client.

Fifth, the tendency towards compensating the accountant on the basis of the value of the service rendered and the ability of the client to pay, rather than on a per-diem basis.

Sixth, the tendency to place more value upon the educational training of the public accountant and the probability that in the not-distant future educational requirements in the nature of both academic and professional training will be established for applicants for the certificate of proficiency in accounting and for admission into professional associations.

Seventh, the tendency, of members of the profession to follow more strictly its code of ethics and rules of professional conduct and to seek advancement by cooperation rather by competition.

I believe all these tendencies are real and enduring and that their continuance will result in a never-ending improvement in the great profession of which we all are proud to be members.

The Tax Burden in 1923*

The total tax burden of the United States, including all government units having the power to raise funds by taxation, is placed at $7,716 millions in 1923, against $6,961 millions in 1922, $8,363 millions in 1921, $8,034 millions in 1919, $2,194 millions in 1913, and $875 millions in 1890. Taking the year 1913 as the standard and expressing all figures in terms of dollars of a common purchasing power in that year (i.e., on the basis of the index number of wholesale prices), it is found that the total amount of taxes raised by all government authorities in this country has been growing from $1,080 millions in 1890 to $2,194 millions in 1913, $3,900 millions in 1919, $5,689 millions in 1921, $4,739 millions in 1922, and $5,010 millions in 1923. Thus is appears that the recession in the volume of taxation in 1922 was rather shortlived, and that an upward tendency was again indicated in 1923 which, it appears from preliminary figures at hand, will likely continue in 1924.

It may perhaps be contended that a materially larger proportion of our entire tax revenue is now devoted toward payment of interest on the public debt and of pensions than in pre-war years, which latter items go to swell the totality of national income and hence to that extent do not detract from the funds available for industrial uses. A detailed study of the data bearing on this point indicates, however, that the rates of increase in the gross and net burden of taxation do not differ widely. In 1913, the federal, state and local governments disbursed $208 millions on account of pensions and $224 millions for interest on public indebtedness. In 1923, these amounts were, respectively, $330 millions and $1,447 millions. After deducting these respective amounts from the national tax bill for the years in question, it is found that an increase in the revenue taken away from industrial uses was 237 per cent, compared with a growth of 252 per cent in the gross amount of taxation during the same period. It is therefore, an unquestioned fact that the burden of taxation on industry, using this term in the widest sense, measured in terms of dollars is three and one-half times as high as before the war, and measured in terms of comparable purchasing power, this burden is two and one-half times as high as it was in 1913. Taxes raised by the Federal Government totaled $3,223 millions in 1923 as against $2,802 millions in 1922; taxes raised by state governments increased from $858 millions in 1922 to $882 millions in 1923; and taxes raised by all local governmental authorities showed an increase from $3,301 millions in 1922 to $3,601 millions in 1923.

Before the war, the amount of taxes raised by state and local governments constituted about seven-tenths of the total tax bill. During the war, this ratio had declined, but by 1921 the percentage raised by state and local governments represented one-half of the total. In 1922 the ratio of taxes levied by state and local governments to the total tax bill was 57 per cent, and in 1923 it was 58 per cent, thus indicating the growing importance of state and local tax burdens in recent years.

In view of the fact that all taxes must ultimately be paid out of income of current or past origin, it is interesting to observe the relationship between these two factors. In 1890, all taxes represented 7.2 per cent of the national income; in 1903, 6.7 per cent; and in 1913, 6.4 per cent. This was more or less the tendency throughout the world, for national wealth and income had been growing faster than the tax burden. During the war, the tax burden began to grow much more rapidly than the national income, so that by 1919 the ratio of taxes to income was 12.1 per cent; by 1921 it had increased to 16.7 per cent; but by 1922 it declined to 12.0 per cent, and by 1923, to 11.6 per cent. Thus about one-eighth of the national income goes toward the support of governmental authorities in this country as compared with one-sixteenth before the war. Because the recession in national income in 1924 is likely to be appreciable as compared with 1923, and in view of the continued rise in the volume of state and local taxation, it is highly probable that the ratio of taxes to income will be higher in 1924 than in the preceding year.

* National Industrial Conference Board Bulletin.

Index Number on Paper for February Down

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 14, 1-925.—In the survey of current business just made public by the Department of Commerce an index number of 89 is given for the paper and printing industry in February of this year as compared with 103 in the same month of last year with 112 in January of this year as compared with 113 in the same month of last year.

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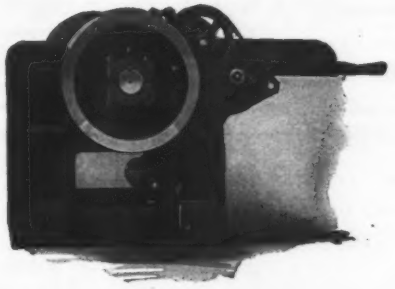

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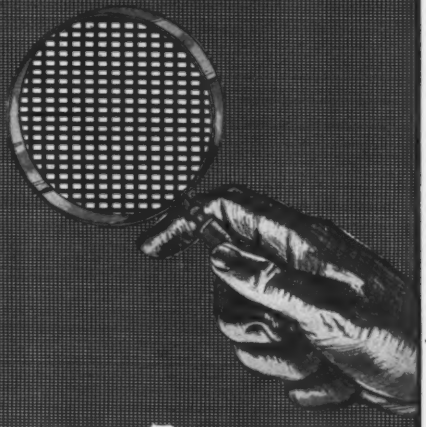

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NEW YORK IMPORTS

WEEK ENDING APRIL 11, 1925

SUMMARY

News print.....922 bls., 2,793 rolls
Printing paper.....104 cs., 71 rolls
Wall paper.....11 bls., 17 cs.
Wrapping paper.....1,181 bls., 10 cs.
Drawing paper.....50 cs.
Cigarette paper.....31 cs.
Writing paper.....21 cs.
Paper hangings.....25 bls., 7 cs.
Filter paper.....17 bls., 12 cs.
Decalcomania paper.....23 cs.
Metal coated paper.....12 cs.
Baryta coated paper.....99 cs.
Hanging Stock.....411 rolls
Packing paper.....232 bls., 19 cs.
Cardboard.....23 bls.
Fancy paper.....3 cs.
Transfer Paper.....9 cs.
Ferro Gallic Paper.....2 cs.
Photo paper.....3 cs.
Colored paper.....5 cs.
Surface coated paper.....167 cs.
Envelopes.....1 cs.
Miscellaneous paper.....267 cs., 200 bls., 14 rolls

CIGARETTE PAPER

Liggett & Myers Tobacco Co., Roussillon, Bordeaux, 6 cs.
P. J. Schweitzer, De Grasse, Havre, 25 cs.

WALL PAPER

F. J. Emmerich Co., Celtic, Liverpool, 2 bls.
Bernard Judae & Co., Leviathan, Havre, 1 cs.
F. A. Binder & Co., George Washington, Bremen, 5 bls.
Whiting & Patterson Co., Berengaria, Havre, 15 cs.
A. C. Dodman, Jr., Inc., Pittsburgh, Antwerp, 1 cs.
A. C. Dodman, Jr., Inc., Pittsburgh, Antwerp, 4 bls.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Celtic, Liverpool, 13 bls.
W. H. S. Lloyd & Co., Celtic, Liverpool, 6 bls.
W. H. S. Lloyd & Co., American Farmer, London, 6 bls.
W. H. S. Lloyd & Co., American Farmer, London, 7 cs.

HANGING STOCK

Drinhausen Hollkott Paper Co., Bremen, Bremen, 411 rolls.

NEWS PRINT

J. P. Heffernan Paper Co., Lucia C., Trieste, 225 bls.
J. P. Heffernan Co., Martha Washington, Trieste, 697 bls.
Dell Publishing Co., Tasmanic, Kotka, 212 rolls.
Janeway & Carpender, Tasmanic, Kotka, 220 rolls.
Irving Bank Columbia Trust Co., Cleveland, Hamburg, 851 rolls.
Parsons & Whittemore, Inc., Bremen, Bremen, 591 rolls.
Parsons & Whittemore, Inc., West Gotomaka, Kotka, 633 rolls.
Parsons & Whittemore, Inc., Columbus, Bremen, 252 rolls.
Chemical National Bank, George Washington, Bremen, 34 rolls.

PRINTING PAPER

Martin & Bechtold, America, Bremen, 17 cs.
B. F. Drakenfeld & Co., Caronia, Liverpool, 14 cs.
Keuffel & Esser, Cleveland, Hamburg, 71 rolls.
Martin & Bechtold, Bremen, Bremen, 10 cs.
Maurice O'Meara Co., Columbus, Bremen, 35 cs.
P. C. Zuhlke, Pittsburgh, Antwerp, 28 cs.

PACKING PAPER

J. P. Heffernan Paper Co., George Washington, Bremen, 232 bls.
Wilkinson Bros. & Co., Inc., Ala, Rotterdam, 19 cs.

WRAPPING PAPER

Maurice O'Meara Co., Lucia C., Trieste, 172 bls.
F. C. Strype, Zeeland, Antwerp, 7 cs.
F. C. Strype, Zeeland, Antwerp, 1 bl.
Wilkinson Bros. & Co., Inc., Zeeland, Antwerp, 10 bls.
Roberts, Cushman & Co., C. Verdi, Genoa, 3 cs.
S. S. Alcorn, Cleveland, Hamburg, 19 bls.
T. Barrett & Son, Cleveland, Hamburg, 111 bls.
Central Union Trust Co., Cleveland, Hamburg, 38 bls.
Maurice O'Meara Co., George Washington, Bremen, 830 bls.

CARDBOARD

J. P. Heffernan Paper Co., Lucia C., Trieste, 23 bls.

FILTER PAPER

A. Giese & Son, Rcussillon, Bordeaux, 17 bls.
F. Henjes, Jr., Bremen, Bremen, 1 cs.
H. Reeve Angel & Co., Inc., Novian, London, 11 cs.

DRAWING PAPER

Keuffel & Esser, Cleveland, Hamburg, 50 cs.

FANCY PAPER

Whiting & Paterson Co., Berengaria, London, 3 cs.

DECALCOMANIA PAPER

L. A. Consmiller, America, Bremen, 19 cs.
Phoenix Shipping Co., Columbus, Bremen, 4 cs.

TRANSFER PAPER

Atlantic Forwarding Co., America, Bremen, 9 cs

FERRO GALLIC PAPER

Keuffel & Esser, Virgilia, London, 2 cs.

PHOTO PAPER

J. J. Gavin, Celtic, Liverpool, 3 cs.

COLORED PAPER

C. W. Williams, Zeeland, Antwerp, 5 cs.

SURFACE COATED PAPER

Prager Co., Zeeland, Antwerp, 13 cs.
Gevaert Co. of America, Zeeland, Antwerp, 32 cs.
Gevaert Co. of America, Pittsburgh, Antwerp, 42 cs.
P. C. Zuhlke, Pittsburgh, Antwerp, 80 cs.

BARYTA COATED PAPER

Globe Shipping Co., George Washington, Bremen, 6 cs.
Globe Shipping Co., Columbus, Bremen, 93 cs.

METAL COATED PAPER

Perry, Ryer & Co., America, Bremen, 12 cs.

WRITING PAPER

Guibout Freres, Leviathan, Havre, 7 cs.
Titan Shipping Co., Leviathan, Havre, 1 cs.
B. Altman & Co., Leviathan, Havre, 2 cs.
Bernard Judae & Co., Leviathan, Havre, 2 cs.
Marshall Field & Co., Berengaria, Havre, 9 cs.

ENVELOPES

H. Reeve Angel & Co., Inc., Novian, London, 1 cs.

PAPER

J. P. Heffernan Paper Co., Lucia C., Trieste, 23 cs.
J. P. Heffernan Paper Co., Lucia C., Trieste, 134 bls.
National Ribbon Co., Volendam, Rotterdam, 3 bls.
Steiner Paper Co., Volendam, Rotterdam, 74 cs.
Prager Co., Volendam, Rotterdam, 1 cs.
J. Livermore, Inc., C. Verdi, Genoa, 10 cs.
Marshall Field & Co., C. Verdi, Genoa, 3 cs.
Perry, Ryer & Co., Athenia, Glasgow, 77 cs.
Keferstein & Demonet, Cleveland, Hamburg, 7 cs.
Maurice O'Meara Co., Martha Washington, Trieste, 63 bls.
T. D. Downing & Co., Bremen, Bremen, 38 cs.
National City Bank, George Washington, Bremen, 14 rolls.
J. I. Bernitz, Ala., Rotterdam, 8 cs.
Kolesch & Co., Ala, Rotterdam, 10 cs.
C. H. Boulin, De Grasse, Havre, 12 cs.
Coenca Morrisson Co., De Grasse, Havre, 2 cs.
H. Reeve Angel & Co., Inc., Havre Maru, Kobe, 2 cs.

RAGS, BAGGINGS, ETC.

S. Birkenstein Sons, America, Bremen, 38 bls. rags.
Whaling Waste Products Co., America, Bremen, 52 bls. jute waste.
National City Bank, Lucia C., Trieste, 99 bls. rags.
Bankers Trust Co., Lucia C., Trieste, 16 bls. rags.
State Bank, Lucia C., Trieste, 83 bls. rags.
Brown Bros. & Co., Lucia C., Venice, 381 bls. dark cottons.
Mechanics & Metals National Bank, Lucia C., Palermo, 100 bls. dark cottons.
Equitable Trust Co., Zeeland, Antwerp, 110 bls. flax waste.
American Exchange National Bank, Volendam, Rotterdam, 43 bls. rags.
National Bank of Commerce, Volendam, Rotterdam, 13 bls. rags.
E. J. Keller Co., Inc., Volendam, Rotterdam, 32 bls. rags.
L. Sher & Son, Volendam, Rotterdam, 31 bls. rags.
The Stone Bros. Co., Volendam, Rotterdam, 33 bls. rags.
Atlas Waste Manufacturing Co., Volendam, Rotterdam, 42 bls. paper stock.
Darmstadt-Scott Co., Volendam, Rotterdam, 42 bls. rags.
E. Butterworth & Co., Bankdale, Marseilles, 61 bls. rags.
Mechanics & Metals National Bank, Bankdale, Marseilles, 151 bls. rags.
Mechanics & Metals National Bank, Bankdale, Marseilles, 51 bls.. bagging.
Equitable Trust Co., Bankdale, Marseilles, 38 bls. rags.
Guaranty Trust Co., Bankdale, Marseilles, 35 bls. rags.
Seaboard National Bank, Bankdale, Marseilles, 22 bls. rags.
Chatham & Phoenix National Bank, Bankdale, Marseilles, 17 bls. rags.
L. H. Abenheimer, Bankdale, Marseilles, 75 bls. rags.
E. J. Keller Co., Inc., Bankdale, Marseilles, 66 bls. rags.
W. Barnet & Son, Caronia, Liverpool, 38 bls. rags.
Hughes Fawcett, Caronia, Liverpool, 25 bls. flax waste.
W. Schall & Co., Lalande, Buenos Aires, 293 bls. rags.
Brown Bros. & Co., Athenia, Glasgow, 57 bls. rags.
The Stone Bros. Co., Athenia, Glasgow, 16 bls. rags.
Mechanics & Metals National Bank, Athenia, Glasgow, 33 bls. rags.
Anglo-South American Trust Co., Athenia, Glasgow, 125 bls. rags.
W. Barnet & Son, Celtic, Liverpool, 63 bls. rags.
B. D. Kaplan, Celtic, Liverpool, 19 bls. rags.
S. Silberman & Sons, Cabo S. Maria, Genoa, 204 bls. cotton waste.
Railway Supply & Mfg. Co., Cabo S. Maria, Genoa, 80 bls. cotton waste.
Royal Manufacturing Co., Cabo S. Maria, Genoa, 45 bls. cotton waste.
G. Carrizzo, Cabo S. Maria, Genoa, 269 bls. rags.
National City Bank, Cabo S. Maria, Leghorn, 144 bls. rags.
E. J. Keller Co., Inc., Cabo S. Maria, Marseilles, 147 bls. rags.
Textile Waste Merchandising Co., Cabo S. Maria, Marseilles, 134 bls. rags.
W. Steck & Co., Cabo S. Maria, Marseilles, 195 bls. rags.
L. H. Abenheimer, Cabo S. Maria, Marseilles, 147 bls. rags.
E. Butterworth & Co., Inc., Cabo S. Maria, Marseilles, 37 bls. rags.
Atterbury & McKelvey, Cabo S. Maria, Barcelona, 173 bls. rags.
W. Barnet & Son, Roussillon, Bordeaux, 9 bls. rags.
State Bank, Roussillon, Bordeaux, 75 bls. rags.

(*Continued on page 66*)

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Imports of Paper and Paper Stock

(*Continued from page 64*)

Guaranty Trust Co., American Farmer, London, 136 bls. cotton waste.
International Accep. Bank, Balsam, Belfast, 73 bls. paper stock.
National City Bank, Keifuku Maru, Hamburg, 140 bls. rags.
Anglo-South American Bank, Keifuku Maru, Hamburg, 69 bls. rags.
Whaling Waste Products Co., Cleveland, Hamburg, 45 bls. jute waste.
Castle & Overton, Inc., Cleveland, Hamburg, 41 bls. rags.
W. Schall & Co., Cleveland, Hamburg, 78 bls. rags.
E. J. Keller Co., Inc., Cleveland, Hamburg, 63 bls. bagging.
E. J. Keller Co., Inc., Cleveland, Hamburg, 17 bls. thread waste.
Guaranty Trust Co., Salina, Oran, 178 bls. rags.
Royal Manufacturing Co., Salina, Genoa, 100 bls. cotton waste.
Castle & Overton, Inc., Salina, Genoa, 83 bls. rags.
Castle & Overton, Inc., Bremen, Bremen, 111 bls. bagging.
National City Bank, Bremen, Bremen, 80 bls. card waste.
Brown Bros & Co., Bremen, Bremen, 70 bls. rags.
Guaranty Trust Co., Bremen, Bremen, 401 bls. rags.
The Stone Bros. Co., Bremen, Bremen, 50 bls. rags.
E. J. Keller Co., Inc., Bremen, Bremen, 201 bls. bags.
E. J. Keller & Co., Inc., Indep. Hall, Havre, 38 bls. rags.
E. J. Keller Co., Inc, Ala, Rotterdam, 332 bls. rags.
E. J. Keller Co., Ala., Rotterdam, 124 bls. bagging.
P. Berlowitz, Ala., Rotterdam, 94 bls. rags.
Castle & Overton, Inc., Ala, Rotterdam, 5 bls. rags.

OLD ROPE

Brown Bros. & Co., Zeeland, Antwerp, 152 bls.
Brown Bros. & Co., Cleveland, Hamburg, 90 coils.
Brown Bros. & Co., Bristol City, Bristol, 178 bls.
International Purchasing Co., Volendam, Rotterdam, 146 coils.
N. E. Bergen, C. S. Maria, Barcelona, 71 coils.
Cohen & Co., Antilla, Nassau, 7 bls.
Manufacturers Trust Co., Pittsburgh, Antwerp, 69 bls.

SUNN ROPE

Degrauw, Aymar & Co., Pittsburgh, Antwerp, 54 coils.

CHINA CLAY

C. T. Wilson & Co., Inc., Bristol City, Bristol, 25 casks.

WOOD PULP

Scandinavian Pulp Agency, Inc., Tasmanic, Gothenburg, 325 bls. sulphate pulp.
Castle & Overton, Inc., Cleveland, Hamburg, 685 bls. wood pulp, 137 tons.
Castle & Overton, Inc., Keifuku Maru, Hamburg, 140 bls. wood pulp, 28 tons.
M. Gottesman & Co., Inc., Keifuku Maru, Hamburg, 400 bls. wood pulp, 61 tons.
Equitable Trust Co., Keifuku Maru, Hamburg, 664 bls. wood pulp, 100 tons.
Ira L. Beebe & Co., Keifuku Maru, Hamburg, 3,024 bls. wood pulp, 572 tons.
International Accep. Bank, Ala, Rotterdam, 705 bls. wood pulp, 153 tons.
Tidewater Paper Mills Co., Bornholm, Liverpool, N. S., 12,345 bls. wood pulp.
Ira L. Beebe & Co., Inc., F. Schoop, Konigsberg, 9,453 bls. wood pulp, 1,900 tons.

WOOD FLOUR

A. Kramer & Co., Topdalsfjord, Flekkefjord, 680 bags, 34,500 kilos.
A. Kramer & Co., Volendam, Rotterdam, 500 bags.
Bergstrom Stroeve Co., United States, Kotka 519 bags.

CASEIN

Atterbury Bros., Inc., Terrier, Buenos Aires, 734 bags, 50,040 kilos.
T. M. Duche & Sons, Terrier, Buenos Aires, 734 bags, 44,040 kilos.
Irving Bank Columbia Trust Co., Lalande, Buenos Aires, 417 bags.
National City Bank, Voltaire, Buenos Aires, 667 bags.

PORTLAND, MAINE, IMPORTS

WEEK ENDING APRIL 11, 1925

The Borregaard Co., Inc., Malmen, Gothenburg, 2,925 bls. wood pulp.
Waterfalls Paper Mills Co., Malmen, Gothenburg, 305 bls. sulphite pulp.
Ira L. Beebe &Co., Inc., F. Schoop, Konigsberg, 5,388 bls. wood pulp, 1,077 tons.

NEW ORLEANS IMPORTS

WEEK ENDING APRIL 11, 1925

Castle & Overton, Inc., West Erral, France, 250 bls. rags.
Castle & Overton, West Erral, France, 21 bls. bagging.
Castle & Overton, Inc., Cardonia, Spain, 118 bls. bagging.
Castle & Overton, Inc., Gand, France, 82 bls. rags.

NORFOLK IMPORTS

WEEK ENDING APRIL 11, 1925

Castle & Overton, Inc., West Inski, Rotterdam, 500 bls. wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING APRIL 11, 1925.

Paper Manufacturers Co., Tasmanic, Kotka, 158 bls. news print paper.
F. Weber & Co., C. S. Maria, Genoa, 6 cs. paper.
Keystone Blue Paper Co., Ala, Rotterdam, 13 cs. paper.
J. H. Weil, Masaniello, Marseilles, 7 cs. paper.
Brown Bros. & Co., Blommersdyk, Rotterdam, 111 bls. paper.
Koons, Wilson & Co., Meltonian, Liverpool, 1 cs. photo paper.
H. Bayersdorfer & Co., Sudbury, Hamburg, 1 cs. crepe paper.
Chemical National Bank, Sudbury, Hamburg, 90 rolls news print paper.
E. J. Keller Co., Inc., Sudbury, Hamburg, 893 bls. rags.
Second National Bank of Boston, Sudbury, Hamburg, 72 bls. rags.
Brown Bros. & Co., Sudbury, Hamburg, 62 bls. rags.
Goldaman, Sachs & Co., Sudbury, Hamburg, 104 bls. dark cottons.
Castle & Overton, Inc., Sudbury, Hamburg, 866 bls. rags.
Philadelphia Blanket Co., Sudbury, Hamburg, 102 bls. cotton waste.
Philadelphia National Bank, London Commerce, London, 244 bls. paper stock.
Equitable Trust Co., London Commerce, London, 297 bls. waste paper.
J. B. Moors & Co., London Commerce, London, 122 bls. waste paper.
W. Schall & Co., London Commerce, London, 111 bls. rags.
Winter, Wolf & Co., Hameln, Bremen, 119 bls. rags.
Brown Bros. & Co., Hameln, Bremen, 240 bls. rags.
Union National Bank, Hameln, Bremen, 145 bls. rags.
Castle & Overton, Inc., Hameln, Bremen, 192 bls. rags.
E. J. Keller Co., Inc., Hameln, Bremen, 860 bls. rags.
Union National Bank, C. S. Maria, Genoa, 78 bls. rags.
R. Wolf, C. S. Maria, Leghorn, 194 bls. rags.
Salomon Bros. & Co., C. S. Maria, Marseilles, 81 bls. rags.
Castle & Overton, Inc., Ala, Rotterdam, 265 bls. rags.
Reis & Co., Ala, Rotterdam, 71 bls. cotton waste.
E. J. Keller Co., Inc., Ala, Rotterdam, 233 bls. rags.
G. M. Graves Co., Inc., Ala, Rotterdam, 115 bls. rags.
Union National Bank, Masaniello, Barcelona, 51 bls. old twines.
E. J. Keller Co., Inc., Blommersdyk, Rotterdam, 572 bls. rags.
Manufacturers Trust Co., Blommersdyk, Rotterdam, 41 bls. rags.
The Stone Bros. Co., Blommersdyk, 25 bls. rags.
Anglo-South American Trust Co., Blommersdyk, Rotterdam, 295 bls. dark cottons.
S. Birkenstein Sons, Blommersdyk, Rotterdam, 113 bls. rags.
C. J. Webb, Bay State, Liverpool, 16 bls. rags.
C. J. Webb, Meltonian, Liverpool, 19 bls. rags.
Castle & Overton, Inc., City of Eureka, Italy, 239 bls. rags.

BOSTON IMPORTS

WEEK ENDING APRIL 11, 1925

Maurice O'Meara Co., Malmen, Gothenburg, 16 rolls paper.
Maurice O'Meara Co., Malmen, Gothenburg, 24 bls. paper.
G. F. Malcolm, Bay State, Liverpool, 35 bls. tissue paper.
McLaurin-Jones Co., Missouri, London, 31 rolls paper.
Andrews & Cook, Sac City, Antwerp, 56 bls. flax waste.
First National Bank of Boston, Sac City, Antwerp, 27 bls. flax waste.
Forte Moran Co., Sac City, Antwerp, 41 bls. rags.
Lee, Higginson & Co., Sac City, Antwerp, 91 bls. thread waste.
Maurice O'Meara Co., Sac City, Antwerp, 35 bls. bagging.
T. D. Downing Co., Sac City, Antwerp, 41 bls. new cuttings.
T. D. Downing Co., Meltonian, Manchester, 68 bls. new cuttings.
Baring Bros. & Co., Meltonian, Manchester, 81 bls. rags.
Baring Bros. & Co., Meltonian, Manchester, 36 bls. bagging.
J. B. Moors & Co., Meltonian, Manchester, 161 bags hide cuttings.
New England Waste Co., Meltonian, Manchester, 17 bls. new cuttings.
J. B. Moors & Co., Meltonian, London, 225 bags hide cuttings.
Train, Smith & Co., Meltonian, London, 183 bags hide cuttings.
Atlantic National Bank, Meltonian, London, 104 bls. cotton waste.

(*Continued on Page 68*)

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HISTORY OF PAPER MANUFACTURING IN THE UNITED STATES, by Lyman Horace Weeks (1916). An account of the origin and development of paper manufacture in the United States from 1690 to 1916.
CHEMISTRY OF PULP AND PAPERMAKING, by Edwin Sutermeister (1920). A practical book for paper mill chemists, superintendents and students. It is based on notes and experiences of the author during a long term of service as chemist in the industry as well as study of the literature related to the subject. It assumes a moderate knowledge of chemistry on the part of the reader. ($6.)
PULP WOOD AND WOOD PULP, by Royal S. Kellogg (1923). A treatise on the basic raw material for paper with statistical data of production and consumption of pulp wood, wood pulp and newsprint paper in North America. There are also chapters on the properties of North American pulp wood, the timber supply and timber production from a practical forestry standpoint. ($4.)
MANUFACTURE OF PULP AND PAPER, in five volumes, edited by J. Newell Stephenson. Volumes I and II (1921) deal with mathematics and sciences such as electricity, chemistry and hydraulics in their relation to the paper industry. Volume III (1922) is an authoritative and up-to-date treatise on the Preparation and Treatment of Wood Pulp. Volume IV (1924) covers Preparation of Rags and Waste Papers, Beating, Sizing, Coloring and a Description of the Fourdrinier Paper Machine. Volume V (in preparation) will be published during 1924 or early in 1925 and covers the Manufacture of Paper and general mill equipment. A set of textbooks covering American practice designed for study and reference. ($5 per volume.)
TECHNICAL METHODS OF ANALYSIS, by Roger C. Griffin (1921). An excellent handbook for analytical chemists. The chapter on Wood Paper and Papermaking Chemicals is especially valuable. ($6.)
MODERN PULP AND PAPER MAKING, by G. S. Witham, Sr. (1920). A practical American treatise which gives particulars of every phase of papermaking from the sawmill to the press room. ($6.)
A TEXTBOOK OF PAPERMAKING, by C. F. Cross and E. J. Bevan. Fifth edition, containing additional matter with collaboration with J. F. Briggs. A very good treatise covering English practice. ($9.)
THE TREATMENT OF PAPER FOR SPECIAL PURPOSES, by Louis Edgar Andes (1907). The processes of manufacture for a variety of paper products are outlined. It is not a working manual, but it contains a collection of formulas and furnishes for parchment and grease-proof papers as well as for a whole series of novelty papers. ($3.50.)
THE ACTION OF THE BEATER, by Dr. Sigurd Smith (1923). An exhaustive treatise based on five years' study and systematic investigation in a paper mill. A valuable book for technologists of papermaking. Translated from the German by Renold Marx. Foreword by C. F. Cross. ($3.60.)
PAPER TESTING METHODS, by the Committee on Paper Testing of the Technical Association of the Pulp and Paper Industry (1922). A practical treatise on the analysis and testing of paper. Microscopical, chemical and physical processes described with the apparatus employed. ($3.)
CLASSIFICATION AND DEFINITION OF PAPER TERMS. By F. A. Curtis and Clarence J. West. Price $1.50.

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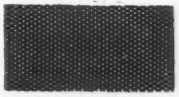
Perforated Metal Screens

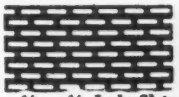
For Pulp and Paper Mills



.065 Inch Round

STEEL, COPPER, BRASS, BRONZE and other Alloys

punched for Centrifugal and Rotary Screens, Pulp Washers, Drainer Bottoms, Filter Plates, etc.



⅛ x ½ Inch Slots

CHARLES MUNDT & SONS
53-65 FAIRMONT AVE. JERSEY CITY, N. J.

Imports of Paper and Paper Stock

(*Continued from page 66*)

J. Cohen & Josephy, Meltonian, London, 10 bls. rags.

American Express Co., Bay State, Liverpool, 43 bls. rags.

Brown Bros. & Co., Missouri, Antwerp, 42 bls. flax waste.

Spaulding Fibre Co., Missouri, Antwerp, 372 bls. flax waste.

Crocker-Burbank Co., Missouri, London, 286 bls. waste paper.

Baring Bros. & Co., Missouri, London, 127 bls. waste paper.

Baring Bros. & Co., Missouri, London, 41 bls. rags.

Merchants National Bank, Missouri, London, 82 bls. rags.

First National Bank of Boston, Missouri, London, 276 bls. rags.

Parsons Paper Co., Missouri, London, 17 bls. rags.

Whiting Paper Co., Missouri, London, 14 bls. rags.

Crocker-Burbank Co., Capulin, London, 146 bls. waste paper.

Train, Smith & Co., Capulin, London, 147 bls. rags.

Baring Bros. & Co., Capulin, London, 62 bls. cotton waste.

W. T. Lockett Co., West Cohas, Liverpool, 19 bls. rags.

American Express Co., West Cohas, Liverpool, 17 bls. rags.

First National Bank of Boston, West Cohas, Liverpool, 61 bls. cotton waste.

T. D. Downing Co., West Cohas, Liverpool, 62 bls. rags.

Brown Bros. & Co., Missouri, London, 672 coils old rope.

Brown Bros. &Co., Meltonian, Liverpool, 58 coils old rope.

Moore & Munger, France Maru, Fowey, 762 tons china clay.

English China Clays Sales Corp., France Maru, Fowey, 3,292 tons china clay.

Kalbfleisch Corp., Terrier, Buenos Aires, 1,334 bags casein, 80,040 kilos.

First National Bank of Boston, Terrier, Buenos Aires, 417 bags casein, 25,020 kilos.

Atterbury Bros., Inc., Jethou, Fredrikshald, 1,500 bls. sulphite pulp.

J. Andersen & Co., Jethou, Greaker, 2,808 bls. sulphite pulp.

Buck, Kiser & Co., Jethou, Greaker, 250 bls. sulphite pulp.

Atterbury & McKelvey, Jethou, Tofte, 750 bls. sulphite pulp.

Nilsen, Lyon & Co., Inc., Jethou, Tofte, 250 bls. chemical pulp.

Nilsen, Lyon & Co., Inc., Jethou, Oslo, 150 bls. sulphite pulp.

Atterbury & McKelvey, Jethou, Oslo, 250 bls. mechanical pulp.

The Borregaard Co., Inc., Jethou, Husum, 504 bls. sulphate pulp.

Castle & Overton, Inc., West Inskip, Rotterdam, 505 bls. wood pulp.

Bulkley, Dunton & Co., Anna Jensen, 1,875 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING APRIL 11, 1925

M. Gotteaman & Co., Inc., Malmen, Gothenburg, 152 rolls news print.

National City Bank, West Nosska, Dublin, 64 bls. rags.

A. Brown Sons, Sac City, Antwerp, 150 bls. rags.

Parsons & Whittemore, Inc., Malmen, Gothenburg, 515 bls. sulphite pulp.

M. Gotteaman & Co., Inc., Kei Maru, Hamburg, 1,000 bls. wood pulp, 153 tons.

E. J. Keller Co., Inc., Kei Maru, Hamburg, 667 bls. wood pulp, 100 tons.

Lagerloef Trading Co., West Gotomska, Kotka, 508 bls. wood pulp, 101 tons.

Nilsen, Lyon & Co., Inc., West Gotomska, Kotka, 900 bls. wood pulp, 150 tons.

Irving Bank Columbia Trust Co., Svanhild, Oslo, 2,000 bls. wood pulp.

Perkins, Goodwin & Co., Svanhild, Oslo, 1,050 bls. wood pulp.

J. Andersen & Co., Svanhild, Greaker, 660 bls. wood pulp.

National City Bank, West Campgaw, Hamburg, 2,258 bls. wood pulp, 651.6 tons.

Ira L. Beebe & Co., Inc., West Campgaw, Hamburg, 2,853 bls. wood pulp.

Castle & Overton, Inc., West Inskip, Rotterdam, 128 bls. wood pulp.

Bulkley, Dunton & Co., Svanhild, 2,000 bls. wood pulp.

Government Paper Bids and Awards

WASHINGTON, D. C., April 15, 1925.—The Government Printing Office has received the following bids for 1,810 pounds of white index bristol board 22½ x 28½—191 pounds; R. P. Andrews Paper Company, 28 cents; American Writing Paper Company, 14 cents and 14.5 cents; Barton, Duer and Koch Paper Company, 16.98 cents; Old Dominion Paper Company, 18.8 cents and 29.9 cents; Maurice O'Meara Company, 29 cents; Barton, Hobart Paper Company, 18.78 cents; Mathers-Lamm Paper Company, 20 cents; Hano-Weinhrantz Company, 20 cents and Berkshire Hills Paper Company, 36 cents.

The Government Printing Office has received the following bids for 8,600 pounds white bond paper 21 x 32—43 pounds, No. 24: Aetna Paper Company, 19.62 cents per pound; American Writing Paper Company, 17 cents; Whitaker Paper Company, 15.97 cents; Barton, Duer and Koch, 15.95 cents; Dobler and Mudge, 17.25 cents; Old Dominion Paper Company, 15.79 cents; Reese and Reese, 19.26 cents; Barton-Hobart Paper Company, 20 cents.

The Government Printing Office has received the following bids for 10,000 pounds of binders board No. 2 quality, 25 x 30—No. 60: Kerr Paper Mill Company, $76 per ton; Whitaker Paper Company, $82.81; Dobler and Mudge, $90.00.

The Government Printing Office has also received bids as follows for 20,000 solid fibre containers, 17 x 11⅜ x 11⅛: A. George Schulz Company, $121.50 per ton; Bird and Son, Inc., $140; Ohio Boxboard Company, $115.00; Hummel & Downing Company, $140.00; River Raisin Paper Company, $117.00 less one per cent; The Pa Pro Company, $135.00 and $138.50; Kieckhefer Container Company $111.00; Consolidated Paper Company, $105.65; Bogota Paper and Board Company, $122.50; Chicago Mill and Lumber Company, $123.00; T. A. Cantwell & Co., $126.50; Eddy Paper Corporation, $121.20; Philadelphia Paper Manufacturing Company, $106.75; O. B. Andrews Paper Company, $128.00 less two per cent.

The R. P. Andrews Paper Company has been awarded the contract for furnishing the Government Printing Office with 48,000 sheets of 8½ x 11-11/16, blue press board at 15.25 cents per pound and the same firm will also furnish 6,000 sheets of 8½ x 11⅞ of the same red at 14.75 cents. Bids for these items were received on March 9.

The Mathers Lamm Paper Company will furnish 40,000 pounds (28,000 sheets) of 24½ x 34, No. 35, boxboard at $53.25 per ton, bids for which were received on March 23.

The Kerr Paper Mills Company will furnish 8,000 pounds of 26 x 38, No. 10, No. 2 binders board at 3.45 cents per pound, bids for which were received on March 30.

The Printing Office will receive bids on April 20 for 1,810 pounds of white index bristol board and 500 sheets of 24 x 38, paraffin manila paper.

Myers Paper Mill to Be Sold at Auction

DENVER, Col., April 10, 1925.—The mill of the Myers Pulp and Paper Company, practically a new plant, having been erected in this city only a few years ago, is to be sold at public auction, May 27, according to an order issued by Judge George F. Dunklee.

Financial difficulties seized this concern from the start, the cost of the plant being approximately $300,000 more than the estimate and on August 8, 1923, it was placed in the hands of Wilbur F. Denious as receiver. To the outsiders the plant seemed to be making headway and that it would pay its way, but various suits were brought and a thorough investigation showed that while the properties are worth $643,400, there is an indebtedness of $323,000 and that the plant has been operating at a loss of $500 monthly since the receiver took hold.

One of the latest suits brought was by a group of stockholders and it was stated that the plant should cease operation and be sold, that such would be for the best for all concerned and it was because of this suit that the court investigated and issued the selling order. All claims against the concern must be filed with the clerk of the Denver district court on or before April 15 and that no claims not entered will participate in the distribution of the proceeds. Bidders for the property must deposit their bids with the receiver of the company at the public sale and accompany their bids with cash or certified checks in the amount of one tenth of the bid price.

Kuttroff, Pickhardt & Co., Inc.

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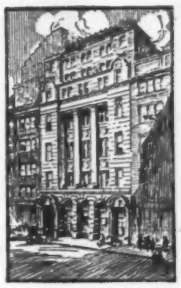
PROVIDENCE - - - 52 Exchange Place
PHILADELPHIA - - - - 111 Arch St.
CHICAGO - - - - 305 W. Randolph St.

—ALSO—

MONTREAL - - - - 10 St. Peter Street

P.

Import Credits



Complete facilities for opening letters of credit in Scandinavia to finance importations of woodpulp and paper. ∴ ∴ ∴

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52 Cedar Street, New York

PAUL M. WARBURG, *Chairman* — F. ABBOT GOODHUE, *President*

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Papers:

Genuine Vegetable Parchment
For wrapping all moist and greasy foodstuffs.

Bread Wraps—Waxed Papers
For tight-sealing cartons and wrapping dry foods.

Bond and Ledger Papers
All standard sizes, weights and colors.

Handy Household Papers in Rolls
Ask and ye shall receive full information.

KALAMAZOO VEGETABLE PARCHMENT CO.
Manufacturers of
PARCHMENT, WAXED and BOND PAPERS

KALAMAZOO, MICHIGAN
Where *Quality* is the watchword.

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—INCORPORATED—

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PHILADELPHIA CHICAGO

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BELGIUM SPAIN

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Rags, Pulp, Paper Stock

Sole Agents in the United States for

Waldhof, Tilsit & Ragnit
Bleached and Unbleached Sulphite

Also

Pine Tree Pulp Company
Groundwood

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
Wednesday, April 15, 1925.

There has been a falling off in activity in the paper trade during the first half of the month and the business which is being done at the present time is largely of a routine nature. A slight falling off in demand has extended to most lines of paper. The consumers are only inclined to buy for the day or for immediate requirements and are satisfied to leave the future to take care of itself. They are not in an anticipatory mood by any means. Paper men realize that they are drawing close to the summer interlude but sales efforts are powerless to stimulate business and bring orders which are hanging fire over the line before the summer dullness sets in. At this writing it seems evident that the coming summer is to be a repetition of last summer and, while business may be no worse than it was then there seems to be no good reason for expecting it to be much better.

News print keeps up at a most satisfactory pace. The New York dailies have been putting out some large issues and apparently advertising and circulation is not being hurt by the conditions of the times. News print should carry through the summer without any serious interruption. Consumption will probably fall off somewhat as it always does during the vacation period but it is believed the demand will hold close enough to the present level to keep the mills busy.

The book paper market is fairly active. Most of the mills are moderately busy and the business is coming along steadily and consistently. Those mills which have contract business to fall back on are now doing a prosperous business but those not so fortunately fortified are obliged to engage in keen competition to get sufficient orders to keep them occupied.

Box board has been doing exceedingly well and prices are holding firm.

Mechanical Pulp

The pulp mills have been highly favored by weather conditions and ample water supply. For that reason the supply of ground wood is increasing and overcoming the disadvantages encountered a short time ago when ice and snow hampered their operations. Demand is fairly active and the market is steady. The good business being done in news print and board naturally makes a good call for ground wood. Most producers are well sold ahead and there is little surplus stock in the market.

Chemical Pulp

The chemical pulp market is firm and now that the Swedish labor trouble has been adjusted importers are making their offers in the usual way with the knowledge that they will be able to take care of all business committed to their hands. Shipments of pulp from abroad have been heavy for some weeks.

Old Rope and Bagging

Things are still inclined to be quiet in the old rope and bagging market. Orders are lagging and while many have felt that a price reduction might follow, the prices are holding firm at this time. The only change during the past week, in fact, was an upward one, manila rope, both foreign and domestic, being quoted at a slightly higher figure.

Rags

Rags are not showing any increased animation and business is by no means what it should be at this time of year. Some of the dealers have of late been receiving abnormal shipments of foreign rags and this is taken as an indication that they see a better demand in the near future. Prices on domestic rags are holding firm. A few changes have occurred in foreign rags. Unbleached cottons have gone to a higher level while a few of the grades have come down.

Waste Paper

The demand for waste paper is spotty. The mills are buying in small tonnage and are searching for means to cover their needs with the smallest possible quantity of stock. Prices are holding their own but the tendency is downward. The present demand can not long maintain the present values.

Twine

While Easter gave the twine men a little spurt in demand that demand has quickly fallen off and twines are now answering only a half-hearted call. Prices remain at the same level as for some weeks.

D. Graff & Sons Add to Warehouse Facilities

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., April 14, 1925.—Esidore and Sam Graff of D. Graff & Sons, dealers in paper stock, announce the erection of a large addition to the concern's warehouse facilities in East Willard street. The new structure will be three stories and basement, 24 by 110 feet in dimensions, 10,000 square feet of floor space in all and will be located immediately west of the plant purchased from the Kalamazoo Sedan Company. Brick and concrete will be used, the price announced in the permit is $6,000. Plans for the building were prepared by Leroy and Newlander. The contract has been awarded to the Kalamazoo Building Company.

Since purchasing the plant of the Kalamazoo Sedan Company, the Graffs have completely converted that structure to their needs by the installation of elevators, bale carriers and by reinforcing the carrying capacity of the structure. It has a floor space of 40,000 square feet.

City of Holyoke Takes Legal Steps

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 14, 1925.—The city of Holyoke will take independent steps to obtain from the Federal Court permission to sell one or more mills of the American Writing Paper Company for back taxes.

Already the preliminary legal steps have been taken at Boston to petition the court to grant permission for the sale. It is not stated what mills it is proposed to place liens upon to satisfy the back taxes of $400,000. According to Massachusetts law, the company can buy back the mills any time within two years.

WOOD PULP AGENTS

PRICE & PIERCE, LTD.,

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AUTOMATIC CONTINUOUS SCREW PRESS

FOR DEWATERING PULP

ADVANTAGES

1. AUTOMATIC—requiring a minimum of labor to operate.
2. CONTINUOUS IN ACTION—hence large saving in power and increase in capacity.
3. ECONOMICAL IN POWER—small power required to operate.
4. HEAVY CONSTRUCTION—hence requiring a minimum of repairs.

AMERICAN PROCESS CO.
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Clay
300 Tons daily

Entire production of a group of mines under one management insures uniformity in quality and minimum production costs.

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AMERICAN MADE FOR AMERICAN TRADE
THE MINER EDGAR CO.
110 William Street
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The B Co. Inc. QUALITY PULPS

HAFSLUND NORWAY — **"HAFSLUND BEAR" Bleached Sulphite**

F. HAGA — **"FORSHAGA" Bleached Sulphite**

KRAFT HURUM NORWAY SPECIAL — **"HURUM SPECIAL" Extra Strong Kraft**

KOOS BAC — **"BAMBLE" Extra Strong Kraft**

The Borregaard Company
Incorporated
200 FIFTH AVENUE NEW YORK, N. Y.

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, April 15, 1925.

The chemical market continues to hold its own but this is not to be misconstrued as meaning that anything spectacular in the line of business is being done or that chemical market conditions are so good that they could not well be better. It is only when the chemical men contrast conditions in the chemical market with conditions which prevail in general business that they realize that they are not so bad off after all and that they have no reason to complain. Here and there occasionally appears a bright flash of trading but there is not the steady volume of orders to give things the proper tone. Prices are for the most part inclined to be firm and there is little cutting and slashing to help demoralize the market. While the outlook is not promising of material betterment there is nothing to signify that it is going to get materially worse and it is probable that conditions will remain just about as they are until the really hot weather brings the inevitable slump.

BLANC FIXE.—Blanc fixe stands just about where it did a week ago. Prices are holding up and business is coming through consistently although in less volume than would be welcomed. The pulp is today selling at from $60 to $70 a ton while the powder is bringing from $75 to $90 a ton.

BLEACHING POWDER.—Bleaching powder had a very good week and its condition, everything considered, is very fair. There is a good amount of contract business while some spot business is being done. There have been reports during the past week that prices are being cut but investigation shows that these reports are false and that prices are being strictly adhered to in every quarter. Stock is moving sufficiently to prevent any great accumulation and it is expected that when hot weather really sets in the available stock will be kept at a minimum and that the manufacturers will so curtail their production as to permit the demand to regulate it. The price is still 1.90 cents a pound.

CAUSTIC SODA.—Caustic soda is progressing favorably. The volume of business done in this community since the first of the year has been very satisfactory. Recently the market was reported as weakening but it has made a quick recovery and is now back on its balance again. Contract tonnage moves satisfactorily and while spot buying could not be better there is no real alarm felt. The price holds firm at from 3.10 to 3.15 cents a pound.

CASEIN.—There is nothing new concerning casein. It is doing well as it has been doing right along while the price remains at from 12 to 13 cents a pound.

CHINA CLAY.—China clay continues to answer an excellent call. The clay demand has been more than satisfactory for weeks but the demand has fallen off a trifle since March 15. The shrinkage in business, however, has been too slight to cause any alarm and even at the present writing the chemical men express themselves as well satisfied with its behavior. The imported grades are bringing from $16 to $20 a ton while the domestic grades are selling at from $12 to $15 a ton.

CHLORINE.—Chlorine has suffered no further reaction since that reported recently and is now in fair demand with the market somewhat stronger than it was a week ago. The quotation is from $4.50 to $7.00 a pound in tanks.

ROSIN.—Rosin which has been having an animated career has not yet reached the end of its rope. The demand is strong and the price has undergone a further advance during the past week. Conditions look most favorable for it at the present time. The prices now being quoted at the naval stores centers range from $6.85 to $7.00.

SALT CAKE.—The betterment which has been looked for in the salt cake market began coming through during the past week. An increased volume of business has started to come from the pulp manufacturers and from several other sources. The demand of the past week took up practically all the accumulation of stock and prices are steady at this writing. It is still being quoted at from $17 to $20 a ton.

SODA ASH.—Soda ash is still in that highly satisfactory state that has marked it for weeks. The soda ash men say they are well sold up for the remainder of the year on a contract basis. The price is still 1.38 cents a pound on a flat basis at the works.

SULHPHATE OF ALUMINA.—Sulphate of alumina is having an exhilirating demand. The paper men are making their contract withdrawals while there is enough spot business to liven up the market. There is no change in the price which is from 1.40 to 1.45 cents a pound for the commercial grades at the Eastern works and from 2.10 to 2.25 cents a pound for the iron free.

SULPHUR.—Sulphur is moving with its contract regularity and the price holds at from $18 to $19 a ton.

TALC.—Talc which has been looking upward for some weeks is still going along nicely and is selling at the recently increased price of from $17 to $18 a ton.

David F. Lawlor Acting Manager

[FROM OUR REGULAR CORRESPONDENT.]

BELLOWS FALLS, Vt., April 14, 1925.—Notices have been posted in the offices of the International Paper Company here that W. E. Horne has resigned as general manager for the local plant and that David F. Lawlor has been appointed acting manager for the present. The change came as a complet surprise locally. Mr. Horne came here in November, 1923, taking the place of James E. Meyers who had been with the company many years. Mr. Lawlor came to Bellows Falls from Ireland about 30 years ago and has been with the International for 20 years.

Robbed Cash Boxes

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 14, 1925.—Thieves stole about $400 from cash boxes in the vault at the central repair shop of the American Writing Paper Company one night last week.

MONTREAL SYNDICATE TALK

(*Continued from page* 31)

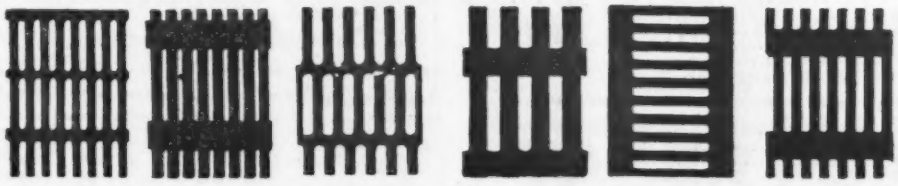
Foundation Company of Canada, Limited, are the contractors for the erection of the buildings. The Wayagamack Pulp and Paper Company, Limited, through its subsidiary, has contracted in London, under the British Trade Facilities Act, a five per cent fifteen-year loan of £425,000. It is expected that the company will complete its financial requirements by the issue, on the Canadian market, of $1,500,000 five-year gold notes.

John R. Booth Alert on 98th Birthday

Hale and vigorous, with every mental faculty alert, John Rudolphus Booth, of Ottawa, the founder of the mammoth lumber and paper industry at the Chaudiere which bears his name, embarked last week upon the 99th year of his life, amid the congratulations of the J. R. Booth Company staff, and thousands of admirers in Canada, the United States and elsewhere. In accordance with past customs, Mr. Booth, at his home, was presented by the office staff with a basket containing American Beauty roses, one for each year of his life. Saturday, following the routine he has set for himself, summer or winter, Mr. Booth made his daily round of the different branches of the big plant at the Chaudiere, shaking hands with some of the older employes, who are wont to greet him and offer many happy returns upon the anniversary of his natal day. Mr. Booth was born in Waterloo, Que., on April 5th, 1827, and has lived in Ottawa for nearly 70 years of his long and useful life.

PERFORATED METALS

All sizes and shapes of Holes



All kinds and thicknesses of Metal

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Electrical, Mechanical, Physical, Chemical and Photometric Tests

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Machines for Processing Paper
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ATHENS, WIS.

TO OUR SUBSCRIBERS

The Postmaster General under date of January 30 issued an order which gives the same expedition to newspapers as is accorded to first class mail. The essence of the order is that newspapers shall not be mixed with parcel post at any point in their dispatch from the publishers' office until their delivery to the addressees. Papers should be handled by themselves and kept in constant transit, not being sent to railroad terminals to be remarked. In other words they are to be handled in the same manner as first class mail. The PAPER TRADE JOURNAL falls under this ruling and subscribers may therefore in the future expect to receive their copies more expeditiously than they have in the past.

Market Quotations

Quoted by Hepburn & Co., No. 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Abitibi Power and Paper, Gen. 6s 1940	99	102*
Advance Bag and Paper, 7s 1943	97	100*
Aroostook Pulp and Paper, 6s 1925	99	...
Bastrop Pulp and Paper, 7½s 1932	104	108*
Brompton Pulp and Paper, 6s 1927	93	95
Beaver Board, 8s 1933	87	89
Bedford Pulp and Paper, 6½s 1942	98	...
Berkshire Hills Paper Co., 8s 1941	...	80
Beaver Board, N. Y. Curb, 8s 1933	93	95
Beaver Products Corp., 7½s 1942	102	104
Belgo Canadian Paper, 6s 1943	99	100
Brown Paper Co., 8s 1931	102	105*
Berlin Mills, 5s 1931	99	...
Bryant Paper Co., 6s 1942	98	101
Brown Company Serial, 6s 1925-43	97	100
Central Paper, 6½s 1925-42	90	95
Cape Breton Pulp and Paper, 6s 1932	98	102
Carthage Sulphite Pulp and Paper, 8s 1941	40	50
Champion Coated Paper Co., 6s 1924-34	...	102
Champion Fibre Co. Notes, 8s 1930	101	...
Cherry River Paper, 5s 1929	97	100*
Chicoutimi Pulp Co., 6s 1943	63	...
Donnaconna Paper Co., Ltd., 6s 1940	98	100
Eddy Paper, 7s 1931	96	...
Eagle Paper, 6½s 1932	96	100
Escanaba Paper, 6s 1933	84	88
Fox River Paper, 7s 1931	100	...
Fort Orange Paper Co, 7s 1942	90	...
Eddy Paper Co., 7½s 1931	94	98
Gilbert Paper Co., 7s 1927	96	...
Gilbert Paper Co., 6½s 1923-29	101	102*
Hammermill Paper Co., 6s 1930-39	98	...
Hercule Corp'n, 8s 1936	98	101
Hummell, Ross Fibre Corp., 7s 1925	90	...
Jessup & Moore Paper Co., 6s 1939	93	97
Kenmore Pulp and Paper Co., 6s 1937	89	...
Lake Superior Pulp and Paper, 6s 1941	105	...
Mattagami Pulp and Paper, 6s 1937	90	...
Marinette & Menominee, 7½s 1936	103	105
Mengel Company, 7s 1934	100	103
National Paper and Type, 6s 1947	96	99*
Oswego Falls Corp., 8s 1942	101	103*
Orono Pulp and Paper, 5s 1941	93	96*
Orono Pulp and Paper, 6s 1943	97	100*
Oxford Paper Co., 6s 1947	99	...
Parsons Pulp & Lumber 1st 7s 1928	95	...
Paterson Parchment Paper, 5½s 1927-28	97	99
Paterson Parchment, 6s 1938	97	99
Parker, Young Co., 6½s 1944	92	96
Price Bros. & Co., Ltd., 6s 1943	99	101
Provincial Paper Mills, Ltd., 6s 1940	97	...
Riordon Co., Series A, 8s 1940	108	110
Riordan Paper, 6s 1924	91	94
Riordan Pulp and Paper, Ltd., 6s, 1929	28	30
River Raisin Paper, 8s 1936	104	106
St. Regis Paper, 6½s, 1929-35	97	102
Smith (Howard) Paper Mills, 7s 1941	93	95
Smith (Howard) Paper Mills, 6s 1934	94	...
St. Croix Paper, 5s 1923-37	95	...
Stevens & Thomson Paper, 6s 1942	88	92
Spanish River Pulp and Paper, 6s 1931	105	108
Spanish River Pulp and Paper, Gen 8s 1941	106	109
Ticonderoga Pulp and Paper Co., 6s, 1940	91	95
Ticonderoga Pulp & Paper 1-5, 1930	88	93
Whittaker Paper, 1st 7s 1942	94	98
Watab Paper Co., 6½s 1942	99	102
Waterway Paper Products, 7s 1924-27	95	100
Wayagamack Pulp and Paper, Ltd., 6s 1951	87	90

STOCKS	BID	ASKED
Abitibi Power and Paper, Com	65	67
Abitibi Power and Paper, Pfd	106	115*
Advance Bag and Paper, Com	8	12*
Advance Bag and Paper, Pfd	70	75*
Beaver Board, Com	5	8
Beaver Board, Pfd	38	...
Bryant Paper, Cap	12	...
Bryant Paper, Pfd	9	...
Brompton Pulp and Paper, Cap	23	25
Chicago Mill & Lumber Co., Com	63	...
Chicago Mill & Lumber Co., Pfd	98	104
Crown Williamette, Com	93	98*
Crown Williamette, 7% A., Pfd	98	SW
Donnaconna Paper, Pfd	95	100
Great Northern Paper, Cap	250	...
Howard Smith Paper Co., Com	22	23
Howard Smith Paper Co., Pfd	70	75
Jessup & Moore Paper, Pfd	74	78
International Paper Co., Com	48	50
International Paper Co., Pfd	73	75
Mengel Company, Com	37	40
Mengel Company, Pfd	76	...
Oxford Papers, Com	93	97
Oxford Paper Co., Pfd	98	...
Provincial Paper Co., Com	94	98
Provincial Paper Co., Pfd	99	...
Price Brothers, Cap	...	39
St. Croix Paper	185	215
St. Maurice Paper Co., Cap	83	88
St. Regis Paper Co., Cap	33	37
Smith (Howard) Paper Co., Ltd., Com	25	28
Smith (Howard) Paper Co., Ltd., Pfd	85	87
Spanish River Pulp and Paper, Com	105	107
Spanish River Pulp and Paper, Pfd	115	...
Ticonderoga Pulp and Paper, Cap	145	...
West Virginia Pulp and Paper. Cap	44	47
West Virginia Pulp and Paper, Pfd	85	100
Whittaker Paper, Com	13	...
Whittaker Paper, Pfd	50	...

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.50	@ 3.90
Rolls, transit	3.75	@ 4.25
Sheets	4.00	@ 4.25
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.25	@ 8.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—		
White No. 1	.70	@ .90
Colored	1.00	@ 2.25
White No. 2	.70	@ .80
Anti-Tarnish	1.25	@ 2.50
Kraft	.85	@ .95
Manila	.70	@ .80
Kraft—		
No. 1 Domestic	5.50	@ 6.25
No. 2 Domestic	4.50	@ 4.75
Imported	5.50	@ 5.75
Manila—		
No. 1 Jute	9.25	@ 9.50
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.00
Fibre Papers—		
No. 1 Fibre	5.50	@ 6.00
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.50	@ 2.75
S. Screening	3.25	@ 3.75
Card Middler	4.00	@ 5.00
Boards—per ton—		
News	45.00	@47.50
Straw	50.00	@55.00
Chip	50.00	@52.50
Binders' Boards	75.00	@80.00
Sgl. Mla. Ll. Chip	60.00	@62.50
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.80	@ .90
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	34.00	@38.00

(F. o. b. Mill)

No. 1 Domestic	28.00	@32.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.75	@ 4.50
Easy Bleaching	2.90	@ 3.25
No. 1 strong unbleached	2.75	@ 3.25
No. 2 strong unbleached	2.45	@ 2.80
No. 1 Kraft	2.90	@ 3.00
Sulphate—		
Bleached	3.75	@ 3.95

(F. o. b. Pulp Mill)

Sulphite (Domestic)—		
Bleached	3.75	@ 4.50
Easy Bleaching Sulphite	2.90	@ 3.25
News Sulphite	2.45	@ 2.75
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	2.70	@ 3.25
Soda Bleached	4.00	@ 4.25

Domestic Rags

New Rags

Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	14.50	@15.25
New White, No. 2	8.00	@10.00
Silesias No. 1	10.50	@11.50
New Unbleached	14.00	@15.00
Washables	6.50	@ 9.25
Fancy	975	@10.25
Blue Overall	10.50	@11.50
New Blue Prints	7.50	@ 8.50
New Soft Blacks	5.75	@ 6.20
Mixed Khaki Cuttings	5.75	@ 6.50
Pink Corset Cuttings	10.50	@11.00
Pink Muslin	10.25	@10.75
New Light Seconds	3.25	@ 3.50
O. D. Khaki Cuttings	6.50	@ 7.50
Men's Corduroy	6.00	@ 6.75
New Mixed Blacks	4.00	@ 5.00

Old Rags

White, No. 1—		
Repacked	8.00	@ 9.00
Miscellaneous	6.50	@ 7.00
White, No. 2—		
Repacked	4.75	@ 5.25
Miscellaneous	4.00	@ 4.50
St. Soiled, White	3.00	@ 3.50
Thirds and Blues—		
Repacked	4.00	@ 4.25
Miscellaneous	3.25	@ 3.50
Black Stockings	4.00	@ 4.50
Roofing Rags—		
Cloth Strippings	3.15	@ 3.25
No. 1	3.15	@ 3.25
No. 2	2.85	@ 3.05
No. 3	2.00	@ 2.25
No. 4	2.75	@ 2.85
No. 5A	1.80	@1.50

Foreign Rags

New Light Silesias	9.50	@10.50
Light Flannelettes	11.00	@12.00
Unbl'ched Cottons	14.00	@15.00
New White Cuttings	14.00	@15.00
New Light Oxfords	10.00	@11.00
New Light Prints	9.00	@10.00
New Mixed Cuttings	4.25	@ 4.75
New Dark Cuttings	3.75	@ 4.25
No. 1 White Linens	10.50	@11.50
No. 2 White Linens	7.50	@ 8.50
No. 3 White Linens	6.25	@ 6.75
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.25	@ 4.75
Ord. Light Prints	3.75	@ 425
Med. Light Prints	3.75	@ 4.25
Dutch Blue Cottons	4.00	@ 4.50
Ger. Blue Cottons	4.00	@ 4.25
Ger. Blue Linens	425	@ 4.75
Checks and Blues	3.50	@ 3.75
Linsay Garments	2.35	@ 2.45
Dark Cottons	2.25	@ 2.35
Shoppery	2.15	@ 2.25
French Blues	4.00	@ 4.50

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—		
Foreign	3.00	@ 3.10
Domestic	3.15	@ 3.25
Wool Tares, light	2.60	@ 2.70
Wool, Tares, heavy	2.70	@ 2.80
Bright, Bagging	2.55	@ 2.65
Mixed Bagging	2.30	@ 2.40
Sound Bagging	2.20	@ 2.30
Roofing Bagging	1.60	@ 1.70
Manila Rope—		
Foreign	6.50	@ 7.00
Domestic	6.75	@ 7.25
New Bu. Cut	3.50	@ 4.00
Hessian Jute Threads—		
Foreign	4.00	@ 4.25
Domestic	3.25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.60	@ 3.90
Hard, White, No. 2	3.25	@ 3.50
Soft, White, No. 1	2.90	@ 3.15
Flat Stock—		
Stitchless	1.45	@ 1.55
Overissue Mag	1.45	@ 1.55
Solid Flat Book	1.40	@ 1.50
Crumpled No. 1.	1.25	@ 1.35
Solid Book Ledger.	1.80	@ 1.90
Ledger Stock	1.60	@ 1.70
New B. B. Chips	.65	@ .75
Manilas—		
New Env. Cut	2.45	@ 2.60
New Cut. No. 1.	1.75	@ 2.00
Extra No. 1 old.	1.40	@ 1.50
Print	1.20	@ 1.30
Container Board.	.70	@ .90
Bogus Wrapper	1.00	@ 1.10
Old Krafts Machine compressed bales.	2.05	@ 2.15
News—		
No. 1 White News.	1.95	@ 2.10
Strictly Overissue	1.05	@ 1.15
Strictly Folded	.95	@ 1.05
No. 1 Mixed Paper.	.65	@ .75
Common Paper	.45	@ .55

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.43	@ .48
No. 2	.41	@ .43
No. 3	.40	@ .42
India, No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
B. C., 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.56	@ .61

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Finished Jute—			
Dark, 18 basis...	.30	@	.31
Light, 18 basis...	.28	@	.30
Jute Wrapping, 3-6 Ply—			
No. 1	.20	@	.23
No. 2	.18	@	.20
Tube Rope—			
4-ply and larger.	.15	@	.17
Fine Tube Yarn—			
5-ply and larger.	.20	@	.28
4-ply	.21	@	.24
3-ply	.22	@	.25

Unfinished India—			
Basis	.14	@	.15
Paper Makers' Twine			
Balls	.12	@	.13
Box Twine, 2-3 ply	.14	@	.15
Jute Rope	.20	@	.40
Amer. Hemp, 6....	.30	@	.32
Sisal Hay Rope—			
No. 1 Basis.....	.14	@	.16
No. 2 Basis.....	.10	@	.12
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.18	@	.19

CHICAGO

Paper

F. o. b. Mill

All Rag Bond.....	35	@	40
No. 1 Rag Bond..	25	@	35
No. 2 Rag Bond..	14	@	25
Water Marked Sulphite	9	@	12
Sulphite Bond.....	7	@	10¾
Sulphite Ledger ...	9½	@	12
Superfine Writing..	18	@	24
No. 1 Fine Writing	14	@	18
No. 2 Fine Writing	12	@	14
No. 3 Fine Writing	9	@	12
No. 1 M. F. Book..	5½	@	7½
No. 1 S. & S. C. Book	6½	@	7¾
Coated Book	8	@	10
Coated Label	8	@	10
News—Rolls, mill—	3½	@	4½
News—Sheets, mill.	3¾	@	4¾
No. 1 Manila.....	4½	@	5½
No. 1 Fibre.....	4½	@	5¾
No. 2 Manila.....	3¾	@	4¾
Butchers' Manila...	4	@	4½
No. 1 Kraft.....	5¾	@	6¾
No. 2 Kraft.....	4.75	@	5.00
Wood Tag Boards..	4¾	@	6
Sulphite Screenings.	3.00	@	3.25
Manila Tissue, 24x36 sheet	7½	@	8
White Tissue, 20x30 sheet	7	@	7¼

Boards, per ton—
(Delivered Central Territory)

Plain Chip 45.00	@47.50	
Solid News 47.50	@50.00	
Manila Line Chip.55.00	@57.50	

.Container Lined—			
(Delivered Central Territory)			
85 Test	—	@	75.00
100 Test	—	@	80.00

Old Papers

F. o. b. Chicago

Shavings—			
No. 1 Hard White	3.15	@	3.25
White Envel. Cuttings.....	3.15	@	3.25
No. 1 Soft Shav.	2.85	@	3.00
No. 1 Mixed.....	1.45	@	1.50
No. 2 Mixed.....	1.15	@	1.20
Ledger and Writings	1.50	@	1.55
Solid Books.....	1.35	@	1.40
No. 1 Light Books.	1.00	@	1.05
Blanks	1.90	@	1.95
Kraft	2.10	@	2.15
New Kraft Cuts.	2.30	@	2.35
Manila Envelope Cuttings.....	2.40	@	2.50
Ex. No. 1 Manila..	2.25	@	2.35
Print Manila	.90	@	.95
Folded News (overissue)	—	@	.95
Old Newspapers—			
No. 1	.75	@	.80
No. 2	.65	@	.70
Mixed Papers—			
No. 1	.57½	@	.62½
No. 2	.50	@	.55
Straw Clippings....	.75	@	.80
Binders' Clippings..	—	@	.70
Roofing Stock, f. o. b. Chicago, Net Cash—			
No. 1	30.00	@	35.00
No. 2	28.00	@	33.00
No. 3	26.00	@	31.00
No. 4	20.00	@	25.00

BOSTON

Paper

Ledgers—			
Sulphite	.08½	@	.18
Rag content	.18	@	.36½
All Rag	.38	@	.50
Bonds—			
Sulphite	.08½	@	.14
Rag Content.....	.17	@	.43
All Rag	.36½	@	.51
Writings	.08½	@	.20
Superfines	.20	@	.48
News	.04	@	.06½
Book, M. F.	.06½	@	.10¾
Book, Super	.07½	@	.11
Book, Coated.....	.09	@	.20
Coated Litho.....	.09½	@	.15
Label	.09½	@	.15
Jute Manila No. 1.	.12	@	.13
Manila, Sul. No. 1.	.05	@	.06
Manila, Sul. No. 2.	.03½	@	.04½
No. 1 Kraft	.06½	@	.06½
No. 2 Kraft	.05½	@	.05½
Common Bogus	.03½	@	.04
Straw Board	—	@	50.00
News Board.....	—	@	52.50
Chip Board	—	@	50.00
Single Manila Pulp lined board.....60.00		@	65.00
Single White, patent coated board 77.50		@	85.00
Wood Pulp Board..80.00		@	85.00
Binder Boards 75.00		@	85.00
Tarred Felts—			
Regular 61.00		@	63.00
Slaters 66.00		@	68.00
Best Tarred, 1 Ply, roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	4.00	@	4.25
White Blank News.	1.75	@	2.00
Manila Env. Cuttings	2.80	@	3.00
No. 2 Hard White	3.25	@	3.50
No. 1 Soft White..	.04½	@	—
No. 2 Soft White..	.03¼	@	—
No. 1 Mixed.....	1.60	@	1.75
No. 2 Mixed.....	1.25	@	1.50
Solid Ledger Stock.	2.00	@	2.25
Writing Paper	—	@	1.70
No. 1 Books, Heavy	1.75	@	1.85
No. 1 Books, Light.	—	@	1.50
No. 1 New Manila.	2.50	@	2.60
No. 1 Old Manila.	1.75	@	2.00
Print Manila	1.05	@	1.20
Old Kraft	2.00	@	2.25
Overissue News ...	1.00	@	1.20
Old Newspapers....	.70	@	.75
No. 1 Mixed Paper..	.60	@	.65
Box Board, Chip....	.60	@	.65

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	—	@	3.00
Domestic	—	@	3¼
Manila Rope	6.00	@	6.50
Mixed Rope	1.50	@	2½
Scrap burlaps....	—	@	3.00
Wool Tares, heavy.	—	@	3.00
Mixed Strings...	—	@	2.25
New Burlap Cuttings	—	@	3.75

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.15½	@	.15
Silesias, No. 1..	.11	@	—
New Unbleached.	.14¼	@	.15
Washable	.07½	@	.08
Fancy	.10½	@	—
Cottons—According to Grades—Blue—			
Blue overalls....	.12½	@	—
New Black, soft...	.07	@	—
Khaki Cuttings....	.07	@	—
Corduroy	.04	@	.04½
New Canvas.....	.12	@	.12½

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1.....10.00		@	—
Repacked	9.50	@	—
Miscellaneous	8.50	@	—
White No. 2—			
Repacked	6.50	@	—
Miscellaneous ...	5.25	@	—
Thirds and Blues—			
Repacked	5.00	@	—
Miscellaneous	3.50	@	—
Roofing Stock—			
No. 1.....	3.00	@	—
No. 2.....	3.00	@	—
No. 3.....	2.50	@	—
No. 4.....	2.00	@	—

PHILADELPHIA

Paper

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	.13	@	.18
Extra fine.....	—	@	.22
Fine	.20	@	.26½
Fine, No. 2.....	.16	@	.25
Fine, No. 3.....	.12	@	.20
Book, M. F.....	.06	@	.07
Book, S. S. & C..	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph..	.09	@	.12
Label	.09	@	.12
News	.03¼	@	.04
No. 1 Jute Manila.	.09½	@	—
Manila Sul., No. 1.	.04½	@	.06
Manila No. 2.....	.04	@	.04½
No. 2 Kraft.....	.05	@	.05½
No. 1 Kraft.....	.06¼	@	—
Common Bogus....	.02¾	@	—
Straw Board.....55.00		@	60.00
News Board 52.50		@	—
Chip Board 52.50		@	—
Wood Pulp Board..	4.50	@	5.00
(Carload Lots)			
Binder Boards—			
Per ton 75.00		@	80.00
Carload lots.....65.00		@	70.00
Tarred Felts—			
Regular 61.00		@	63.00
Slaters 66.00		@	68.00
Best Tarred, 1-ply (per roll)	1.70	@	1.80
Best Tarred, 2-ply (per roll)	1.50	@	1.60
Best Tarred, 3-ply.	2.00	@	2.10

Bagging

F. o. b. Phila.

Gunny, No. 1—			
Foreign	2.75	@	2.85
Domestic	2.75	@	2.85
Manila Rope.....	6.25	@	6.50
Sisal Rope	2.50	@	—
Mixed Rope	1.50	@	1.75
Scrap Burlaps....	2.25	@	2.50
Wool Tares, heavy.	2.00	@	2.13
Mixed Strings...	1.25	@	—
No. 1, New Lt. Burlap	3.50	@	3.75
New Burlap Cuttings	3.75	@	—

Old Papers

F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.65	@	3.70
No. 2 Hard White	3.25	@	3.40
No. 1 Soft White	2.70	@	2.80
No. 2 Soft White	2.05	@	2.25
No. 1 Mixed....	—	@	1.80
No. 2 Mixed.....	1.25	@	1.30
Solid Ledger Stock.	1.75	@	1.90
Writing Paper	1.40	@	1.50
No. 1 Books, heavy	1.25	@	1.30
No. 2 Books, light.	1.15	@	1.25
No. 1 New Manila.	2.40	@	2.50
No. 1 Old Manila..	1.50	@	1.75
Container Manila...	.85	@	.90
Old Kraft	2.00	@	2.10
Over issue News...	.90	@	.95
Old Newspaper....	.65	@	.70
No. 1 Mixed Paper.	.50	@	.55
Common Paper.....	.30	@	.35
Straw Board, Chip.	.70	@	.75
Binders Bd., Chip..	.65	@	.70

Domestic Rags—New.
Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.13½	@	.14
New White, No. 2	.06½	@	—
Silesias, No. 1....	.09½	@	.10
New Unbleached.	.12	@	.12½
Washable	.06¾	@	.07¼
Fancy	.08½	@	.09
Cottons—according to grades—			
Blue Overall.....	.10	@	.10½
New Blue	.04	@	.04¼
New Black Soft.	.06	@	.06¼
New Light Seconds	.03½	@	.03¾
Khaki Cuttings...	.05½	@	.06
Corduroy	.04	@	.04½
New Canvas	.08¾	@	.09
New Black Mixed	.05	@	.05¼

Old

White, No. 1—			
Repacked	7.00	@	7.25
Miscellaneous ...	6.25	@	6.50
White, No. 2—			
Repacked	.05½	@	.05¾
Miscellaneous ...	.05	@	.05¼
Thirds and Blues—			
Repacked	3.75	@	4.00
Miscellaneous	3.15	@	3.25
Black Stockings..	4.25	@	4.50
Roofing Stock—			
No. 1	2.00	@	2.15
No. 2	1.90	@	2.00
No. 3	1.25	@	1.35
No. 4	1.10	@	1.20
No. 5A	1.10	@	1.15
B	1.05	@	1.10
C	1.00	@	1.05

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11½	@	.12¾
Light tinted.....	.12½	@	.13¾
Dark tinted.....	.14	@	.15
Ledgers (sulphite)..	—	@	.13
Ledgers No. 1.....	34	@	
Ledgers No. 2.....	26	@	
Writing	.09½	@	
Writing S. C.....	.10	@	
News, f. o. b. Mills—			
Rolls (carloads)..	3.65	@	—
Sheets (carloads).	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	8.25	@	—
No. 2 M. F. (carloads)	7.95	@	—
No. 3 M. F. (carloads)	7.25	@	—
No. 1 S. C. (carloads)	8.75	@	—
No. 2 S. C. (carloads	8.25	@	—
No. 3 S. C. (carloads)	7.75	@	—
No. 1 Coated and litho 14.50		@	—
No. 2 Coated and litho 13.50		@	—
No. 3 Coated and litho 12.75		@	—
Coated tinted.....	.15	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila....	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.....	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood.....	30.00	@	32.00
Sulphite easy bleaching	60.00	@	65.00
Sulphite news grade	55.00	@	60.00
Sulphite, bleached.	80.00	@	—
Sulphate	65.00	@	67.50

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut..	3.60	@	—
Soft White Book shavings	3.25	@	—
White Blk, News.	1.70	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.25	@	—
Light and Crumpled Book Stock	1.10	@	—
Ledgers and Writings	1.40	@	—
Solid Ledgers....	1.40	@	—
Manilas—			
New Manila Cut.	—	@	1.60
Printed Manilas..	1.00	@	—
Kraft	2.15	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News....	.90	@	—
No. 1 Mixed Papers.....	.70	@	—

Domestic Rags—
Price to mills, f. o. b. Toronto

	Per lb.		
No. 1 White shirt cuttings	.15	@	.15¼
No. 2 White shirt cuttings	.08	@	.08½
Fancy shirt cuttings	.09¼	@	.10
No. 1 Old Whites.	—	@	—
Third and blues...	.05½	@	.05¾